Ohio University



Annual Catalogue 1899=1900



CATALOGUE

OF THE

OHIO UNIVERSITY

ATHENS

FOR 1899-1900

AND CIRCULAR OF INFORMATION FOR

1900-1901

1900
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Calendar for 1900-1901.

FALL TERM begins September 11, 1900, and ends December 21, 1900. WINTER TERM begins January 2, 1901, and ends March 22, 1901. SPRING TERM begins April 2, 1901. COMMENCEMENT EXERCISES, 1901, June 16-20. June 20, Commencement.

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ELI DUNKLE, A. M.,
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of Greek.

^{*} Resigned February 1, 1900.

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CHARLES M. COPELAND, B. PED.,
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†Lucy Weethee Bryson, B. S., Assistant in Biology and Geology.

GRACE REAH, A. B., Assistant in Latin and German.

ELI DUNKLE, Secretary and Librarian.

CHARLES G. MATHEWS, PH. M., Assistant Librarian.

[†] Resigned.

General Information.

Ohio University.

ORIGIN OF THE UNIVERSITY.

The existence of the Ohio University was provided for as early as 1787, in the purchase made from the Governs ment of the United States by the Ohio Company of Associates. By the contract between these two parties, two townships of land were set apart for the purpose of a University, and placed under the care of the Legislature of the State. The University was organized under an act of the Legislature passed in 1804. Its Trustees are appointed by State authority and the Governor of the State is, ex-officio, a member of the Board.

LOCATION.

Athens, the seat of the University, is situated in the southeastern part of the State. It is easily accessible from the east and west by the Baltimore and Ohio Southwestern Railroad and its branches; from the central and northern portions of the State by the Columbus, Hocking Valley and Toledo, and Kanawha and Michigan Railways. By these routes it is about one hundred and sixty miles east from

Cincinnati and seventy-five miles southeast from Columbus. The sanitary arrangements of the town are unsurpassed. Its principal streets are paved; it is provided with waterworks and sewerage; its board of health is vigorous and efficient. There are few towns in the country that are more desirable as a place of temporary or permanent residence than Athens.

The lover of natural scenery cannot fail to be charmed with its picturesque surroundings. The winding valley of the Hockhocking and the wooded hills beyond, present a series of lovely views from the University, while the wide prospects, as seen at certain seasons from some of the neighboring summits, are seldom surpassed in quiet and varied beauty.

The University buildings are located in a beautiful campus. They occupy a slight elvation extending east and west across the grounds, fronting the north. Before them lies a park of about five acres containing a grove of fine forest trees and skirted along its northern limit by a row of magnificent elms. Beyond these sentinel trees extends a green sward sloping beautifully to the street. In front of the line at the northwest angle stands an elegant soldiers' monument. When this park is lighted up at night by electricity it presents a charming view. The remainder of the campus, which is in the rear of the buildings, is devoted to recreation.

BUILDINGS.

These are of brick and six in number. The central building was erected in 1817, and is the oldest college edifice northwest of the Ohio River. This venerable structure is dear to many by strong and tender associations, and to many more by names of eminent men who have here studied and taught. It has been modernized and is admirably adapted to its uses for college work.

The two wing buildings once used for dormitories have been transformed into recitation rooms and laboratories. During the year all the work in the west wing, including the electrical plant, has been transferred to the new Administration Building.

The chapel building in the rear of the central building is to be occupied for library purposes. In the second story are society halls with committee rooms attached.

The new Administration Hall now completed is one of the finest college buildings in southeastern Ohio. It is a T-shaped structure, four stories high including basement, and measures 156 feet in length by 131 in depth. Within is an auditorium, with gallery, furnishing seating capacity for about nine hundred people. It contains a president's office, nine recitation rooms with professors' offices attached, the laboratories of the Department of Physics, a trustees' and secretary's office, the rooms of the commercial department, art rooms, and a gymnasium in the basement with four thousand square feet of floor. The methods of heating and arrangement of detail are modern and well adapted to educational work.

LADIES' HALL.

This is located nearly opposite the north entrance of the campus. It is a fine, commodious brick structure, heated by steam, where beautiful rooms are occupied by lady teachers and students. Excellent boarding can be had at moderate cost in the hall.

Hereafter all young ladies who are not residents of Athens will be required to reside in the dormitory unless the rooms are all occupied. Only in special cases will exception be made. This regulation has been adopted with a view solely to the best interests of the young ladies themselves and not with any purpose to restrict them in the enjoyment of every legitimate privilege. It is the aim of

the management to make the place as attractive and pleasant as possible and at the same time to keep the cost as low as is consistent with the accommodations provided. The cost will range from \$3.25 to \$4.00 per week according to size and location of room. Everything is furnished except soap and towels. About thirty young ladies can be received.

LIBRARY AND READING ROOM.

In the study of Literature and History, the most important aid, in addition to a good teacher, is a large stock of well selected books. In this respect the O. U. is liberally provided. The college and society libraries contain about 15,000 volumes, a large part of which are of recent purchase. In addition to the books of a general character, the private libraries of the professors, which contain works of a more special character to the number of several thousand, are also accessible, under certain limitations, to the students. The reading room furnishes access to the latest contributions on all topics under current discussion. Some of the larger works are not only useful for reference, but also for purposes of original investigation.

It is the special aim of the managers of the Library to acquire as rapidly as issued all the leading works bearing on Pedagogy whether in German, French or English. A large number of works on this topic and the history of education is already on hand. The Library is so managed as to be accessible every day. The reading room, in which are placed most of the reference books and all the periodicals, is accessible at all times. The reading of well chosen books not only tells the student what others have thought in every department of knowledge, but likewise stimulates him to think for himself. A good library is of itself a university.

APPARATUS AND CABINET.

The departments of Mathematics, Astronomy, Physics, Chemistry, and Biology are well equipped with valuable apparatus, which is put at the personal disposal of the student. These subjects are illustrated upon the lecture table, but it is insisted upon that a student really enters upon possession of his knowledge only when he has acquired skill in carrying on laboratory experiments by himself under the supervision of the professor.

The large Biological Laboratory has been fitted up with appliances suitable for pursuing extensive courses of study in the various departments of Biology, the selections being made with a view to furnishing each student with such apparatus, reagents, etc., as are necessary for independent work. To this end more than a score of microscopes has been provided and many duplicates of other appliances are at hand. Excellent histological apparatus is in use for freezing and sectioning, and the laboratory is also well equipped for embryological and bacteriological work.

In the department of Physics, besides balances, specific gravity apparatus, pulleys, centrifugal devices, pumps, barometers, manometers, pendulums, and a great deal of other apparatus for the demonstration of the principles and laws of mechanics, etc., there are: a set of mounted tuning forks for bows, a complete set of electromagnetic forks of various pitches, sonometer, siren, pipes, etc., for work in sound; lenses, prisms, mirrors, polariscopes, spectroscope, spectrometer, diffraction gratings, projecting lantern, cameras, etc., for light; radiometers, thermometers, calorimeters and other apparatus for heat; and a very good equipment of dynamos, motors, calibrating and measuring instruments, resistances, galvanometers, condensers, magnetometers, induction coils, batteries, Wheatstone bridges, vari-

ous forms of reversing switches and keys, electrometers, standard cells, electrodynamometers and a great deal of other apparatus suited to the general demonstration of the subject of electricity and magnetism, and to the requirements of the electrical course outlined elsewhere in this catalogue.

The chemical laboratory is equipped for work by the students in general chemistry, qualitative and quantitative analysis, and organic chemistry. The work tables for students are supplied with water and gas. Hoods are supplied for experiments upon the noxious gases. A still is set up for the continuous production of distilled water. The apparatus required by the student for the laboratory work is loaned to him and payment required at the end of the term only for what is missing or has been broken.

A fine set of surveying instruments of the most approved kind has recently been purchased for the students in field work. The cabinet affords important aid in the study of Mineralogy and Geology. But we are greatly in need of further contributions thereto, and to this end the assistance of the friends of the institution is greatly desired and earnestly solicited.

MAPS AND CHARTS.

An excellent set of maps, chiefly those of Kiepert, intended to illustrate the physical features and political changes of the historical countries of Europe and the East has lately been added to the equipment of the institution. These, in addition to those already on hand, afford an important and well-nigh indispensable aid to the study of history and geography. The outfit in this regard is believed to be unusually complete.

ADMISSION AND DISCIPLINE.

Entering the University will be considered a pledge to obey its rules and regulations. These are few and simple, appealing to the student's self-respect and sense of personal responsibility. Persons of known bad character or of lazy habits are not wanted and will not be retained unless they show a decided desire to reform. Students from other colleges must present certificates of honorable dismissal.

Candidates for advanced standing are, in all cases, examined to ascertain their thoroughness and proficiency; but certificates from other institutions will be accepted for the amount of work done in the different departments.

In exceptional cases students are admitted to classes for a week on trial, without examination, provided the professors in charge are reasonably certain that they can maintain their standing.

Ladies are admitted to all departments of the University on the same terms and under the same conditions as those prescribed for young men.

A record is made of the daily work of each student. When the standing of the student, as shown by this record and examination, falls below an average grade of 70 per cent., he must review the study. A record is also kept of each student's deportment. A low standing in either record is followed by private admonition, and notice is given to the parent or guardian.

Whenever the conduct of a student is such as to indicate that he is unfit to be a member of the University, either because of immorality or because of habitual neglect of his college duties, he will be requested to withdraw. But, in the latter case, his parents will first be notified, and if he is not withdrawn within a reasonable time, he will be dismissed.

Stress is laid upon the fact that no young man or woman need hesitate to enter the Ohio University for lack of means, or because of inadequate preparation. The surest guaranty of success is an honest and determined effort to succeed. If the student has learned nothing more during the years spent in college than how to study and how to investigate any subject of which he takes hold, no matter how meager his knowledge may be at the start, he will be able to enlarge it with astonishing rapidity. His time thus spent, whether it be measured by terms or years, will have been wisely employed. Our age is sadly in need of men and women who have such a preparatory training for life's duties.

RELIGIOUS INFLUENCE.

Students are required to be present at roll-call and prayers in the chapel every morning, unless excused by the Faculty, and to attend public worship on the Sabbath; but the choice of the place of attendance is left with the student or his parents. A student's prayer meeting is held once a week, at which attendance is optional. The University is not sectarian, and no effort is made to inculcate the doctrines of any particular creed or denomination; but the utmost care is taken to promote sound and healthy religious sentiments. We feel sure that nowhere do these matters receive more careful attention.

The founder of the Ohio University believed that "religion, morality and knowledge are necessary to good government and the happiness of mankind;" and it has been the steady purpose of those to whom has been entrusted the duty of carrying out his plans to insist on the intimate relation existing between the three. The good man, the good citizen is not he who is best informed, but he who is constantly inspired with the thought that his knowledge

should be used for the good of his fellow-men. Knowledge without virtue is a curse and not a blessing. It is the constant policy of both Trustees and Faculty to inspire students with the love of knowledge, and with desire to practice religion and morality. Accordingly only those persons are invited to profit by the means of instruction here placed within their reach, who are willing to conform their conduct as far as possible to the teachings of the Bible. We expect students who have spent some time with us to depart not only wiser but also better than they came. If such is not the case it will not be for want of care on the part of the Faculty.

YOUNG PEOPLE'S CHRISTIAN ASSOCIATIONS.

Both the Y. M. C. A. and the Y. W. C. A. have flourishing organizations connected with the Ohio University, and a large proportion of the students are members of one or the other. These hold meetings weekly or oftener, provide lectures on religious or Biblical topics, and take an active interest in promoting the spiritual, moral and intellectual welfare of the entire student body. The management of the University is in hearty sympathy with these organizations and does all that is possible to aid them in their work. The Y. M. C. A. especially, is one of the most vigorous among the colleges of the State.

FEES.

There is no charge for tuition in any of the regular preparatory or collegiate classes. But all students pay a registration fee of five dollars per term. Besides this, instruction in the following branches is to be regarded as extra and must be paid for as follows:

Piano lessons or voice culture, per term, two lessons per week \$8 (00 to \$15 00
Use of piano one hour per day, per term	3 00
Bookkeeping and allied branches, per term	5 00
Stenography and typewriting	5 00

The regular fee in Chemistry and Electrical Engineering is one dollar per term to cover the cost of materials used. To this should be added a small charge for breakage—to careful students usually not more than a few cents. After the second term in Chemistry the regular fee is two dollars per term.

Those students who wish to pursue studies privately in the college departments for which they desire to have credit toward the attainment of a degree, will be required to pass an examination on each branch, and for this examination an extra fee of \$5 will be charged, which may, however, be remitted by a vote of the Faculty.

All fees must be paid within the first thirty days of the term. No exception can be made to this regulation. The registration fee must be paid when the student enters.

EXPENSES.

Board can be obtained within a reasonable distance of the University at \$2.75 per week. By forming clubs, students may board at \$2.00 per week. Those students whose circumstances require it, are allowed to board themselves, by which means their expenses may be still further reduced; but this plan is not recommended, because likely to be prejudicial to health.

The actual cost of an education at the University will depend very much upon the disposition and habits of the students. The necessary cost is very low—as low as that of any institution affording equal advantages. It is earnestly recommended to parents not to furnish their sons or daughters with extravagant means. The scholarship and character of a student are often injured by a free indulgence in the use of money. Whatever is beyond a reasonable supply exposes him to numerous temptations and endangers his success and respectability.

As persons frequently wish to know as nearly as may be, the cost of a student for one year at the Ohio University, the following estimates are here given:

LOWEST.	HIGHEST.
Registration fee \$15 00 Board in clubs 70 00 Room 30 00 Books 10 00	Registration fee \$ 15 00 Board in private family 120 00 Room 39 00 Books 15 00
\$125 00	\$180 00

This estimate is for three terms or forty weeks, and includes all necessary expenses except washing, and a small fee for membership in the literary societies. The additional charges for students who take electives in Chemistry and for the special class in Electricity are elsewhere noted.

METHODS OF INSTRUCTION.

Instruction is given both by recitation and lecture. The constant aim in both is to awaken interest in study, to aid in the acquisition of knowledge, and to develop the powers of thought and communication.

Some subjects can be better treated in lectures than others. The knowledge the student has of a subject is likewise a factor that is taken into account. The lecture method is generally better adapted to advanced students than to those who are still in the elements. After the elementary principles have been thoroughly mastered from the textbook, supplemented with such elucidations as seem to be called for, the student is generally prepared to profit by the lectures of the teacher, and to grasp the wider outlook that is the result of a knowledge of a subject rather than of the contents of any single book, or even of several books. In the observational studies the learner is, as far as possible, brought face to face with the objects themselves under

consideration. The classes in Botany and Geology make excursions into the surrounding country for the purpose of collecting specimens and deriving scientific knowledge from original sources. The classes in Surveying and Mensuration have practice in the use of instruments in field work.

COURSES OF STUDY.

Such courses of study have been adopted as experience has proved to be best adapted to the purpose of liberal education. The classical course in fullness and matter, will compare favorably with that of the best institutions. The philosophical course is so arranged as to meet the wants of those who may prefer to study modern languages and English branches instead of Greek, for which French, German and English are substituted. In the scientific, prominence is given to Mathematics and the Physical Sciences.

The pedagogical course is intended to fit young people for the profession of teaching. A fuller statement of its aims and methods will be found in another part of this catalogue.

Those who are able to attend for a short time only, may take a select course, provided the studies they wish to pursue are such as they are qualified to enter upon with advantage. But no student will take a study to which he has not been assigned, or discontinue a study, without permission obtained from the Faculty.

ELECTIVES.

Each student in a regular course will be required to take at least fifteen class exercises per week, and no student will be permitted to take more than seventeen, except on permission of the Faculty. This permission will be given only on the written request of the student. Students in any one of the courses can select subjects in any one of the others below the class to which they are assigned, but not above, except on approval of the Faculty, who must be convinced that they have had sufficient preliminary training to pursue the elected study with advantage. As will be seen, about half the subjects after the freshman year are elective. But in addition to these a large number of others are offered for the benefit of those persons who wish to specialize still further along particular lines. It needs to be noted, however, that they are not offered uncondially. Regard will be had to the time at the disposal of the teachers and to the number of students taking any particular elective, as well as to their preliminary training. In all cases where a student's knowledge of English is defective he must pursue this branch until his deficiencies are made up.

During the past few years a number of students, both undergraduate and post graduate, have pursued advanced studies on special lines. With the recent increase in the number of the Faculty a large number of students can be accommodated and in a larger number of branches.

DEGREES.

The Bachelor's degree is conferred upon students who have completed any one of the four courses laid down in another part of this catalogue. The fee for diploma is five dollars.

The Master's degree will be conferred upon graduates of this or any other college who give evidence to the Faculty that they possess such literary and scientific attainment as will make them worthy recipients of it, and have, in addition, furnished a thesis after one year's work in residence. The fee for this degree is ten dollars.

No degree will be conferred until all dues are paid.

The degree of Doctor of Philosophy will be awarded only to students who have done post-graduate work in residence.

THE EMERSON PRIZE POEM FUND.

The late W. D. Emerson, of the class of '33, bequeathed to the Trustees of the University the sum of one thousand dollars, the interest on which is to be awarded every second year to the student or graduate of the institution who shall write the best original poem. As at present invested it yields an annual revenue of \$65. The first award was made in 1893 to Miss Carrie Schwefel. second award under the bequest was made in 1895. prize was divided between Miss Esther Burns and Mr. John H. Atkinson. The judges were Mrs. Annie Fields, Mr. Maurice Thompson, and Mr. E. C. Stedman. The third, to Miss Virginia M. Houston, the judges being Mrs. Margaret E. Sangster, Mr. W. D. Howells, and Mr. Clinton Scollard. The thanks of the University authorities are due and are herewith tendered to these distinguished writers for the care with which they examined the verses submitted to them as well as for the interest they took in the competition.

The fourth award was to Miss Houston, Miss Arwilla McLane and Mr. J. H. Atkinson.

LITERARY SOCIETIES.

There are two literary societies in the University, the Athenian and the Philomathean. They occupy well-equipped halls in the former chapel building. The members have opportunity to exercise themselves in Declamation, Composition and Oratory, and to become familiar with the modes of conducting business in deliberative assemblies.

Debating clubs are also formed from time to time by those students who desire to have more extended practice in the public discussion of important questions.

FACILITIES FOR PHYSICAL CULTURE.

Gymnasium—The University has a large gymnasium, which has already been equipped with considerable apparatus, and the supply is being increased from time to time. The dressing rooms are supplied with large lockers for clothing and with hot and cold shower baths. The use of the baths and the gymnasium is free to students. In the conduct of the gymnasium the aim is not so much the development of a few gymnastic experts as the provision of wholesome exercise for the many. For this purpose regular instruction in light gymnastics is given for both ladies and gentlemen; on Tuesdays and Thursdays for the ladies, on Mondays and Fridays for the gentlemen. Thirty hours' credit toward graduation is given for one year's class work.

Athletic Field—The athletic field is a level tract of ten acres, owned by the University and situated a few minutes' walk southward from the campus. This field has been equipped especially for base-ball and foot-ball. The campus itself provides room only for tennis-courts, and for a small practice-ground close by the gymnasium.

Supervision of Athletic Sports—The general supervision of athletic sports is vested in two boards; the Advisory Board and the Faculty Committee. The Advisory Board, elected by the Athletic Association, consists of five members; two from the Faculty and three from the student body. This board has charge of all financial affairs of the Athletic Association, and the arrangement for intercollegiate games. The Faculty Committee, composed of three members of the Faculty, has charge of all matters involv-

ing the relation of athletic sports to the University; for example, the eligibility of players proposed for any University team, and the investigation of charges of misconduct on the part of players. The policy of the committee is to foster the spirit of honor and gentlemanliness in athletics, to suppress evil tendencies, and to see that play shall not encroach too much upon the claims of work.

Detailed Statement

OF THE

Departments of Instruction.

GREEK.

PROFESSOR SUPER.
ASSOCIATE PROFESSOR DUNKLE.

It is the aim of this department not only to teach students to read the authors commonly read in colleges, but also to make them acquainted as far as possible with the literature and life of the ancient Greeks. In teaching the language, especially that of Homer, constant attention is called to the words related to other languages, particularly Latin, German and English; and the laws of consonantal mutation are explained. Especial prominence is given, as the student progresses, to the following points: First, form; second, vocabulary; third, relation to cognate languages; fourth, literature and history. The ear is regarded as equally important with the eye in the interpretation of words. When possible, some entire work of an author is read, as it is thought a more lasting and more satisfactory impression will thus be made upon the mind of the student than by the use of selections only.

It is a well established principle in the study and teaching of the ancient languages that they should be made, as far as possible, the basis of a study of antique life. The Greek language embodies the experience of the most remarkable people of antiquity—a people whose achievements in literature, in the arts, and in government have been, and doubtless will continue to be, inexhaustible sources of profitable instruction. It is here claimed that a study of the Greek language, together with all that should properly be taken in connection therewith, will contribute the most important element of a liberal education.

Before admission to the college class in this department, the student must be fairly familiar with the Greek Grammar and have read four books of the Anabasis and five books of Homer's Iliad.

During the past year the students in college Greek read the selections from Herodotus, Thucydides, and Xenophon in Goodwin's Greek Reader; nearly two hundred pages of the Cyropaedeia; Wait's Lysias entire; Kitchel's Plato entire and the Alkestis and the Iphigenia in Tauris of Euripides. More important, however, than the amount of text perfunctorily read, is a knowledge of the Greek language and a true conception of the life of Greek antiquity.

Works of reference: Hadley's and Goodwin's Greek Grammars, Goodwin's Greek Moods and Tenses, Liddell & Scott's Greek Lexicon, Peck's Classical Dictionary, Autenrieth's Homeric Dictionary, Kiepert's Classical Atlas.

ELECTIVES: Students who wish to pursue the study of Greek beyond the regular course can be accommodated with three exercises per week for three terms, the subject to be studied, or the authors to be read, to be selected by the professor. The following is the general program: As the Freshman year is devoted to a review of the Syntax,

the Accidence of the Greek language in general, the student is prepared to take up the study of master-pieces, either in oratory, philosophy or poetry, with special reference to the characteristics of each. With these ends in view, one or more terms may be given to one or more of the Attic orators, to one longer and two shorter Platonic dialogues, or to some of the principal dramas. One elective term in Greek History is offered, and one in Comparative Philology.

LATIN.

PROFESSOR EVANS, ASSISTED BY SEVERAL INSTRUCTORS.

For entrance into the Freshman class, students must complete the Preparatory Latin Course as laid down elsewhere in this catalogue or an equivalent.

During the first part of the Freshman year attention is directed to Latin Rhetoric as exemplified in the works of Cicero and Livy. During the latter part of the year, the class reads the Odes of Horace and studies Roman History. Throughout the whole year there are frequent exercises in sight reading and in turning into the original English renderings of Cæsar, Eutropius, and Nepos.

In the whole work the endeavor is to impress on the minds of the students that Latin is the language of a moral and practical people who left their mark on the world in law and government, and that "Rome is the center of our studies and the goal of our thoughts; the point to which all paths lead, and from which all paths start again."

Hand-books: Allen and Greenough's or Gildersleeve and Lodge's or Harkness' Grammar; Allen's Roman History; Harper's Lexicon, Kiepert's wall maps of the Roman Empire and of various countries; Ginn & Co.'s Classical Atlas; Crutwell's Latin Literature; Gow's "Companion;" Smith's Dictionary of Classical Biography; and Smith and Seyffert's (Nettleship and Sandys') Dictionaries are freely accessible to students for reference in their work.

ELECTIVES: Each year one of the following courses is offered to students who desire to continue the study of the Roman people beyond the course that is required:

1. Latin:

Terence, Cicero, Lucretius, Horace, Juvenal, Tacitus, Paterculus, and Quintilian are studied according to the tendency or the choice of the class.

The students have access also to Simcox's Teuffel-Schwabe's (Warr's translation), and Browne's Histories of Latin Literature, and to Guhl and Koner's Life of the Greeks and Romans.

2. Roman History:

A whole year is given to the study of the military and political history of Rome, special attention being directed to the causes of the struggles between the Patricians and Plebeians, and between Rome and Carthage; and to those which made Rome the conqueror of the world, as well as to the causes which led to the decline of the Republic.

Books for study and reference: Epochs of Ancient History; Lanciani's Ancient Rome in the Light of Recent Excavations; The Great Captains—Hannibal— by Dodge; Duruy's and Mommsen's Histories of Rome; Long's Decline of the Roman Republic; and Labberton's Historical Atlas.

3. The Roman Constitution and Outlines of Roman Law:

This course is of interest to students who look forward to the study of law, as a study of Roman law helps

one to get a clear idea of the fundamental conceptions of Jurisprudence. The study of the development of the Roman constitution and laws will help to understand how all constitutions and laws grow. In the last two courses described, students are required to consult Roman authors in addition to the authors already mentioned.

When students desire it, classes are organized to study the Vulgate Version of the Scriptures, Latin Hymns of the church, the writings of the Latin writers of church history, and other works in Patristic Latin.

MATHEMATICS AND ASTRONOMY.

PROFESSOR HOOVER, ASSISTED BY ONE OR MORE INSTRUCTORS.

The course in pure mathematics embraces ten terms, distributed as follows: Algebra, four terms; Geometry, two terms; Trigonometry and Surveying, two terms; Analytic Geometry, one term; Calculus, one term. Of these, four terms, including Algebra to Series and Plane Geometry, are required for admission into the Freshman class; the remaining six terms are included in the College Department, covering the Freshman and Sophomore years.

See also courses of study and electives.

In teaching the pure Mathematics, especial attention is directed to the value of the study as a means of training the logical faculties. Constant stress is laid upon the steps of reasoning which underlie the various processes; and it is insisted; that the principal business of the college student of Mathematics is to apprehend these clearly.

Power to apply the principles is tested by a wide range of exercises drawn from various sources, and adapted to the capacity of the student. A part of the Spring Term in the Freshman year is devoted to the subject of land surveying and to other applications of Trignometry. This work is important as giving good examples of the utility of mathematical science and its practical applications. The department is in possesion of an excellent set of surveying instruments, including a transit, level, rod, and other necessary appurtenances. These are in frequent use by the students.

ELECTIVES: In this department the following electives are offered: Theory of Equations; Analytic Geometry of Three Dimensions; Differential Equations; Statics and Dynamics; Elliptic Functions; Spherical Harmonics; Quaternions; Determinants; Mathematical Optics; Least Squares; and Astronomy.

RHETORIC AND ENGLISH LITERATURE.

PROFESSOR MILLIMAN. ASSISTANT PROFESSOR WILSON.

Preparatory to College English, the student must have a thorough knowledge of Grammar, and must have completed the following six terms' work or an equivalent.

FIRST TERM. Herrick and Damon's Composition and Rhetoric to Part III.

SECOND TERM. American Literature—selections from Irving, Bryant, Whittier and Poe.

THIRD TERM. American Literature continued—selections from Lowell, Longfellow, Emerson, Hawthorne and Holmes.

FOURTH TERM. English Literature—selections from Shakespeare, Milton, Burke, Addison and Dryden.

FIFTH TERM. English Literature continued—selections from Johnson, Wordsworth, Macaulay, George Eliot and Coleridge.

SIXTH TERM. Herrick and Damon's Composition and Rhetoric completed.

The work in Literature will consist of selections for careful study, and others for more cursory reading.

THE AMOUNT OF COLLEGE ENGLISH REQUIRED FOR GRADUATION.

For the B. S. degree, 96 hours' credit. For the A. B. or B. Ph. degrees, 144 hours' credit. For the B. Ped. degree, 196 hours' credit.

FALL TERM.

- 1. Tennyson. A careful study of selected poems; 3 hours (required for all degrees).
- 2. SHAKESPEARE. Merchant of Venice, Richard III., Macbeth, Julius Caesar, King Lear; Moulton's Shakespeare as a Dramatic Artist to page 224; 4 hours (required for all degrees).
- 3. ORATIONS. This course will consist of the analysis of selected examples of Determinative and Demonstrative Oratory, and the writing of papers and complete orations; 3 hours (junior elective).
- 4. MILTON. A study of selected poems; 3 hours (junior elective).
 - 5. Browning. 4 hours (senior elective).

WINTER TERM.

- 6. RHETORIC Finishasis is placed upon the art of composition rather than upon a theoretical knowledge of rhetoric; 3 hours (required for all degrees).
- 7. LOWELL AND LONGFELLOW. A careful study of selected poems; 3 hours (freshman elective).

- 8. SHAKESPEARE. Othello, The Tempest, As You Like It, Love's Labor Lost, Hamlet; Moulton's Shakespeare as a Dramatic Artist, pp. 225-312; 4 hours (sophomore elective).
- 9. Debates. The object of this course is to give the student training in public speaking, not only in the form of his expressions but also in the delivery and the subject matter treated. The course will be in charge of the professors of Political Economy, Elocution, and English; 2 hours (junior elective).
- 10. CRITICISM. Sherman's Analytics of Literature; 4 hours (senior elective).

SPRING TERM.

- 11. Byron, Shelley, and Keats. A careful study of selected poems; 3 hours (freshman elective).
- 12. Verse Composition. The purpose of this course is to partly familiarize the student with the chief varieties of English verse, and partly to give him the added command of language that comes from practice in different forms; 3 hours (Courses 11 and 12 are open to students who have passed courses 1 or 7.) Courses 11 and 12 will be given in alternate years. Course 12 will be given in 1901.
- 13. CRITICISM. Moulton's Criticism as an Inductive Science applied to Silas Marner, The Scarlet Letter, and The Princess; 4 hours (sophomore elective).
- 14. ENGLISH PROSE FICTION. The purpose of this course is to present the development of the English novel; 3 hours (junior elective).
- 15. HISTORY OF ENGLISH LITERATURE. 4 hours (required for all degrees, except B. S.).
- 16. Teachers' Course. This course is given for those students who expect to teach in the public schools.

The curriculum, the texts, the methods of study, and the aims of teaching literature and composition will be considered; 3 hours (senior elective).

UNITED STATES HISTORY AND POLITICAL ECONOMY.

PROFESSOR B. O. HIGLEY.

The importance of the study of United States History in preparing citizens to exercise the duties incumbent upon them as members of the body politic is growing more apparent every year. Therefore the aim of the teaching in this department is so to read the history of the past as to throw light upon present civic and economic problems, and thus aid in their solution. The disciplinary value of the subjects included in this department is kept constantly in view. History is regarded as a record of the social, economic, moral and political life of the people. Environment, former ideas, and changing industrial conditions are all considered as important factors in determining the course of events. The work of our great leaders in thought and action is studied carefully in connection with the history of the people. Students are encouraged to investigate the civic and economic questions of the present day with minds as free as possible from partisan prejudice and preconceived opinions.

The standard books in Civics and Economics are studied, and the views therein expressed are freely discussed in the class-room. Government publications, magazine articles and other valuable material are read for the purpose of obtaining all the light possible upon the subject under discussion as well as to broaden the mental vision of the student. The work for the year 1899 and 1900 was as follows:

PREPARATORY UNITED STATES HISTORY.-REQUIRED.

FIRST YEAR: Fall term—History of the United States, 3 hours per week.

Winter Term—History of the United States, 4 hours, per week.

Spring Term —Civil Government, 5 hours per week.

COLLEGIATE HISTORY .- ELECTIVE.

Fall Term—the Colonial Period and the Formation of the Union, 4 hours.

Winter Term—The Period of Slavery Agitation, 4 hours.

Spring Term—The Civil War and the Reconstructed Nation, 4 hours.

The Epochs of American History will be used as guides in the study of the above courses.

SPECIAL ELECTIVES.

Fall Term—History and Study of United States Constitution, 3 hours; Territorial Expansion of the United States, 2 hours; Coinage Legislation since 1789 in the United States, 3 hours.

Winter Term—A Comparative Study of State Constitutions, 3 hours; Economic and Political Effects of Immigration, 2 hours; Important Tariff Laws of the United States, 2 hours.

Spring Term—The History of Political Parties in the United States, 3 hours; The Spoils System and Civil Service Reform, 2 hours; Money and Banking, 3 hours.

In the Special Electives, the Madison Papers, The Federalist, Poore's Constitutions and Charters, American

State Papers, Reports of Directors of the United States Mint, the Congressional Globe and Record will be used in connection with the standard histories. The volumes of Bancroft, Rhodes, Von Holst, Schouler, Pitkin, and the American Statesman series are constantly at hand for reference. Hamilton's, Jefferson's, Adams's, Clay's, and Calhoun's Works are always accessible and often used.

For further particulars, see "Course of Study."

POLITICAL ECONOMY.

Fall Term—The Elements of Political Economy, Part I, 3 hours.

Winter Term—The Elements of Political Economy, Part II, 3 hours.

The work outlined above is required in the Collegiate Department. Laughlin's book will probably be the text used. The fundamental principles of the subject will be studied in the first term, followed in the second term by their practical application to the questions of today.

ELECTIVE POLITICAL ECONOMY.

Fall Term—The History of Political Economy, 3 hours. Winter Term—Economics, 3 hours.

Spring Term—Co-operation and Profit Sharing, 3 hours.

The works of Adam Smith, Ricardo, Malthus, John Stuart Mill, Roscher, and others will be examined in the first term. Hadley's Economics will serve as a text-book in the winter term. F. A. Walker's Political Economy and Marshall's Principles of Economics will be used as references. Some phase of the Labor Question will be studied in the third term, Co-operation and Profit Sharing will be

the subject investigated in 1900 unless the class prefer to take up some other question. The department makes arrangements whenever possible for a special class in U.S. History during the Spring term.

PHILOSOPHY AND PEDAGOGY.

PROFESSOR BROWN.

FIRST TERM.

1. Psychology (required).

James' Psychology, Briefer Course, three recitations per week.

2. Psychology (elective).

Ladd's Descriptive and Explanatory Psychology, three recitations per week.

- 3. Logic (elective).
 Mill's Logic or Sigwart's Logic, 2 hours per week.
- 4. Philolsophy (elective).

Watson's Selections from Kant, with readings from the critical works of Caird, Watson, and essays in philosophical magazines, two hours per week. This course will not be offered contemporaneously with Course Three, but may be substituted for it at the option of the instructor.

5. Pedagogy (elective).

Fouillee's Education from a National Standpoint, four recitations per week.

SECOND TERM.

- 6. Psychology (required).
 Continuation of Course 1.
- 7. Logic (required).

 Jevons' Lessons in Logic, four recitations per week.

- 8. Psychology (elective). Continuation of Course 2.
- 9, 10. Logic or Philosophy.

Continuation of one of the alternative courses, 3 or 4, above.

Pedagogy (required for Pedagogical Degree).
 History of Education, Davidson's Greek Education, four recitations per week.

THIRD TERM.

12. Pedagogy (required for Pedagogical Degree).

History of Education, Paulsen's German Universities and Fitch's Thomas and Mathew Arnold, four recitations per week.

- 13. Pedagogy (required as above).

 Science of Education, Laurie's Institutes of Education, four recitations per week.
- 14. Introduction to Philosophy (elective).

 James' Will to Believe and other essays, three recitations per week.
- 15. Logic or Philosophy (elective).

Sigwart's Logic or Bradley's Appearance and Reality, three recitations per week.

BIOLOGY AND GEOLOGY.

PROFESSOR CHAPIN—PROFESSOR MERCER.
ASSISTANT, LUCY WEETHEE BRYSON.

This department embraces all the subjects properly belonging to Biology, together with Inorganic and Organic Geology. The work in Zoology begins with the second year of the preparatory course, and the subject being assigned to the fall term, abundant opportunity is offered for field work. In addition to the material gathered by the class, use is made of preserved marine types which are received from time to time for the purpose of dissection. Each student is required, also, to spend some time in the Zoological Museum, which contains many valuable specimens.

The student enters the laboratory at the very start, and such types are placed before him for examination and dissection as will lead him step by step, to correct habits of observation, by which he is enabled to comprehend the close relations of one form of life to another. As this work is in progress, the subjects under examination are fully discussed, and, on the completion of each dissection, the student is examined upon the work done. Drawings are required of the different parts and organs, in all cases. After a few types have been studied in the laboratory, the subject of classification receives careful attention.

An advanced course in Zoology is offered in the college proper, and a scholarship has been established which insures free tuition and laboratory privileges at the Marine Biological Laboratory, Cold Spring Harbor, Long Island, to the student in this department doing the highest grade of work. The importance of the advantages thus secured cannot be overestimated, as the student is given abundant opportunity to study marine life amidst its proper environments. He will, to this end, be expected to assist frequently in dredging, for which a naptha launch is provided.

The course in Preparatory Physiology aims to give a good general knowledge of Anatomy and Hygiene, and the functions of the different organs. Occasional dissections are performed before the class, and some laboratory work is required of all. In the collegiate course this subject

is studied by more advanced methods. Osteology receives close attention, and each student is expected to give some attention to dissection, besides making a practical study of a few histological structures. Physiological principles and theories are discussed according to the latest investigations; and, in this connection, experiments are performed in the laboratory. The department is supplied with a valuable skeleton and superb French anatomical models. (For more advanced work in Anatomy and Physiology, see Preparatory Medical Course.)

Elementary Botany is required in all the Preparatory Courses except the classical. Work begins with an observational study of germinating plantlets, all students being required to sow the seeds of several representative plants and to make careful drawings of the different stages of growth. Leaves, roots and stems are studied from the objects as far as practicable, and careful dissections of certain typical flowers precede the regular work of Systematic Botany. As time permits, the student is given some insight into the microscopic structure of plants by practical work in the laboratory. An herbarium of not less than forty plants will be required of all, or an equivalent in laboratory work. In the collegiate course the student is set to work at once with the microscope, the object being to secure a knowledge from actual observation of the general anatomy and physiology of plants. This is followed by work upon the Cryptogams, and all will be encouraged to make some special investigations for themselves.

The University is thoroughly equipped for work in General Biology, a required subject in all the collegiate courses. A biological laboratory has recently been completed and fitted up with modern apparatus; including a steam sterilizer, fine optical appliances, dissecting instruments, water bath, paraffin bath, CO² freezer, Minot Micro-

tome, etc. The student is given practical training in Microscopy, and is taught the process of staining and preparation of permanent mountings. It is the intention to give a thorough knowledge of the structure and mode of growth of typical plant and animal forms, and the laboratory work is accompanied with lectures, in which the composition of organisms, methods of reproduction, development and other biological subjects are discussed.

At an early stage of the work in Geology, such objective study of minerals is pursued as will enable the student to comprehend the composition of rocks, which is next taken up. To supplement the text, lectures may be given from time to time upon Dynamical, Structural and Paleontological Geology, and these subjects are further studied in the field. Work is also offered in Determinative Mineralogy. A large cabinet of minerals is open at all times to the student of Geology.

Works of reference: Bessey's Botany, Goodale's Physiological Botany, Gray's Structural Botany, Wolle's Diatomaceæ of N. A., and Desmids of the U. S., Strasburger's Manual of Vegetable Histology, Goebel's Outlines of Classification and Special Morphology, Vine's Physiology of Plants, DeBary's Comparative Anatomy of Phanerogams and Ferns, Huxley and Martin's Biology, Sedgwick and Wilson's Biology, Packard's Zoology, Lang's Vergleichende Anatomie der Wirbellosen Thiere, Landois's Physiology, Stirling's Histology, Piersol's Histology, Shafer's Essentials of Histology, Carpenter's The Microscope, Frey's Microscopical Technology, LeConte's Elements of Geology, Dana's Manual, Dana's Mineralogy, Crosby's Mineralogy, Lyell's Principles of Geology, Geikie's Text Book of Geology, and Government Reports.

COURSE I.

Fall Term-Physical Geography.

Winter Term-Physiology.

Spring Term-Botany.

This course is required of all preparatory students five hours for an entire year.

COURSE II.

Fall Term,
Winter Term,
Spring Term,

The work of the fall term is required of second year preparatory students five hours. Collegiate students may elect the winter and spring term's work.

The winter term is elective for all college classes; the spring term is required for Sophomores, and elective for all college classes. Four hours are allowed for each of the winter and spring terms.

COURSE III.

Fall Term—Osteology.

Winter Term-Physiology.

Spring Term—Vertebrate Anatomy.

The work of this year is elective for all college classes except the winter term, which is required of sophmores.

Course I and the fall term of Course II, or their equivalent, are required for entrance to this course. Four hours are allowed in each course.

COURSE IV.

Fall Term—Histology.

Winter Term—Histology.

Spring Term { Embryology.
Bacteriology.

This course is elective for Juniors. Four hours in the fall term, three hours in the winter term, and three hours each in Embryology and Bacteriology in the spring term are allowed.

COURSE V.

Fall Term { Geology Paleontology } or Botany.

Winter Term—Advanced Biology. Spring Term—Advanced Botany.

The work of the fall term is required; that of the winter and spring terms is elective for Seniors. Four hours are allowed in each course.

COURSE VI-ENTOMOLOGY.

This course is a four-hour elective course for all college classes. The course is given only during the summer term.

PREPARATORY MEDICAL COURSE.

It is desirable in many cases that students looking forward to the medical profession should, after spending four years in collegiate work, be admitted to advanced standing in the medical schools, whereby a year's time may be gained. With this object in view, the department of Biology now offers such work as is, in conjunction with Physics and Chemistry, recognized by the best of these schools the full equivalent of a year's professional study. The departments of Physics and Chemistry furnish abundant opportunities for the work required in that direction. The biological work is, from the very outset, suited to the needs of the medical student. To this end it properly begins with General Biology, to be followed by a comparative study of animal forms and of phanerogamic and cryp-

togamic plants. The development of some vertebrate is closely studied, and preparations of embryos are required of each student. Throughout the course close attention to laboratory work is insisted upon. Practical instruction is given in the preparation of microscopic objects, and the student is taught the technique of section cutting and mounting. A practical knowledge of Human Anatomy is obtained from the careful dissection of some mammal, the many resemblances to the anatomy of man, and the few differences, being continually referred to. Arrangements have been made whereby students of the University are allowed, under certain conditions, to attend post-mortem examinations and to assist in the work. The laboratory is provided with modern apparatus for accurate investigation of disease germs, and the student is therefore required to do practical work in the all-important subject of Bacteriology.

Upon the completion of this course, the student may receive credit for one year's work in the regular course of study at the Medical College of Ohio, Starling Medical College, Columbus, and other medical schools; and graduates pursuing certain prescribed courses in this department will be admitted into the second year of the four-years' course of study in the Medical department of the University of Pennsylvania and Jefferson Medical College, upon presentation of a certificate signed by the professor in charge.

Among the works of reference to be found in the library may be mentioned Gray's Anatomy, Quain's Anatomy, Holden's Anatomy, Landois and Sterling's Physiology, Foster's Physiology, Foster and Langley's Practical Physiology, Foster and Langley's Embryology, Hertwig-Mark's Text-book of Embryology, Lehrbuch der Vergleichenden Entwicklungsgeschichte (Korschelt & Heider), Minot's Human Embryology, Wilder and Gage's Anatom-

ical Technology, Wiedersheim's Comparative Anatomy, Sternberg's Bacteriology and standard tests and guides in Histology. The following subjects are comprehended in this course: General Biology, Zoology, Mammalian Anatomy, Human Anatomy, Histology, Physiology, Structural and Systematic Botany, Vegetable Histology, Embryology and Bacteriology.

PHYSICS AND ELECTRICITY.

PROFESSOR ATKINSON.
ASSISTANT, MR. F. H. SUPER.

1. Elementary Physics.

This work is required in the first and second terms of the third preparatory year in all the courses giving a degree. Recitations three times a week, based on Carhart's and Chute's Physics; laboratory work four hours a week. A small laboratory fee is charged. The laboratory work at least will be required of all high school graduates and others who have not had its equivalent.

2. General Physics.

This course is required throughout the junior year of the Scientific course, and is open as an elective to students in other courses, provided they have the preparation required of students regularly in this course. In all cases a knowledge of Chemistry will be essential, but this may be acquired by entering at the same time the course in Chemistry marked in the sophomore year. No one will be permitted to begin this course until he has completed the course in Mathematics to and including Plane Trigonometry. The instruction consists of class work, with experimental demonstrations and individual laboratory work. As an outline of class work, Hastings and Beach will be used,

though references to numerous works on Physics, particularly on special subjects in Physics, will be given as supplementary to the text. The laboratory portion of the work will be adapted to the requirements of junior students and will presuppose the work in Course 1, or its equivalent. Recitations three times a week, laboratory four hours a week.

3. Physical Laboratory.

This will be a special elective course in heat and light, open to those who have already had 1 and 2.

4. Physical Laboratory.

This is elective, and will be open on the same terms as 3. The course consists of exact measurement in electricity and magnetism. A very excellent special laboratory is now used for the work of this course, and the aim is continually to improve the facilities. Nichols, Stewart and Gee, Kempe, Carhart and Patterson, Stine, and Ayrton will be used as references. Class work twice a week. Laboratory six hours a week during second term.

5. Physical Laboratoy.

This is an elective course given in the third term, consisting of a study of dynamo electric machines to the end of determining and platting their characteristics, efficiency, etc. Lectures twice a week. Laboratory six hours a week.

The fees for laboratory privileges are subject to adjustment.

ELECTRICAL ENGINEERING.

The rapid development of electricity for the purposes of light and power, and its general introduction into all sections of the country, have created a demand for men well qualified in this branch of engineering. The profession now offers excellent opportunities to young men, and the field is so broad that the chances for rapid promotion are very flattering to those properly qualified. The thoroughly educated man who combines practical experience with his theoretical knowledge of electricity and magnetism is in special demand; for many now engaged in this work are poorly fitted for its duties. The college does not lose sight of the fact that mind training is its chief business. Yet it is the guiding principle of this department that the education of the mind is none the less efficient for making use of the tools for this purpose which may at the same time be applied by the trained mind to earning a livelihood. We hold that, instead of being opposed, these two features are correlative.

The college possesses an excellent incandescent lighting plant, used for lighting the buildings and campus, with the design of extending to the student practical training in the construction, operation, and care of electrical and steam machinery. The plant is modern in all its parts, and meets our present requirement for light and power quite satisfactorily. Very extensive additions to our electrical equipment have been made during the present year. Both direct and alternating currents are used. The switches and fittings on the board, wiring, and general installation, are all the work of students. Modifications and extensions from time to time give others excellent opportunities to obtain valuable practice.

The electrical profession requires a great deal of mechanical ability and training in the use of tools for both wood and metal. The department is provided with shops for both, a large forge and lathe-room having been recently provided in the basement of the new Administration Building as a further addition to our facilities in this direction. These shops are provided with wood and metal working

lathes, and a complement of the necessary small tools. Additions to the shop facilities are being made continually. As will appear from the course outlined below, while mastering the use of tools, the student is taught the construction of useful pieces of apparatus for laboratory purposes. The ability thus to construct apparatus and machinery, to preserve the proper relations of the several parts in fitting them together, and in overcoming difficulties that may arise in embodying one's ideas, has a very great educational value aside from its practical aspect.

Below is indicated the course of study in this department. To this is added, however, seminary work with references to the leading treatises on electricity and engineering. Periodicals, such as the American Electrician, Electrical World and Engineer, Power, Scientific American and Supplement, Electricity, Street Railway Journal and Engineering Magazine, are kept on file easily accessible, and are included in the seminary references. For the practical plant work each division of those in this course is now on duty one night in each week. Each engineer is required to keep a record of steam pressure and of the current of each machine at regular intervals. There is cooperation also with the city arc-light plant, and an additional night in each week is spent in learning its care and operation under competent supervision. The student in all this work is taught to operate the plant with the object of attaining its highest efficiency, and to study the greatest economy in the use of all supplies for consumption.

Requirements: This work is elective as a whole, and those taking it must pursue the course regularly in its order unless a portion of it has been previously taken. Hereafter no one will be permitted to begin the theoretical portion of the work until he has passed the first and second

terms of algebra as indicated in the second year of the preparatory course, and has completed the three terms of English marked in the preparatory course; this includes two terms of Literature and one of Rhetoric. However, those not prepared in these branches may be permitted to take up the practical portion of the course, including plant practice, shop work, free hand and mechanical drawing, while making up this work. The higher branches, including Analytical Geometry, Calculus, and Analytical Mechanics, are strongly recommended to students in Electricity, though not absolutely essential to this course. Physics and Chemistry are required as indicated. When the regular electrical course and the auxiliary studies are completed, a certificate will be issued showing the character of the work done. Also, where it is deserved, a recommendation will be issued showing the student's ability in theoretical and practical electricity. This course is subject to such changes from time to time as the development of the subject may dictate.

FIRST YEAR.

FIRST TERM.

Physics. Lectures and recitations three times a week. Laboratory work six hours a week.

Problems in Electricity. Calculations of resistance, potential, batteries, work, electro-magnets, dynamos, and motors. Four hours a week.

Shop Work. Wood-turning, metal-boring, filing and polishing. Four hours a week with no credit.

Free-hand Drawing. Simple geometric solids, one and two views; outlines of simple geometric solids in perspective. Three hours a week.

Plant Duty. Operation of college incandescent and city arc stations. One night a week each.

Mechanical Drawing. Simple geometric drawing for neatness and accuracy in the use of instruments; lettering; use of scales. Three hours a week.

Mathematics. Four hours a week.

SECOND TERM.

Physics. Lectures and recitations three times a week. Laboratory work six hours a week.

Steam. General theory of the steam engine; theory and construction of details; dimensions for required power; indicators, theory and use; valve gears. Four hours a week.

Shop Work. Metal turning, bolt cutting, and tapping. Four hours a week with no credit.

Free-hand Drawing. Outlines and shaded studies of geometric solids, single and grouped; outline and shaded studies of vase forms. Three hours a week.

Plant Duty. Operation and care of college and city stations. One night a week each.

Mechanical Drawing. Descriptive geometry; copying drawings. Three hours a week.

Mathematics. Four hours a week.

THIRD TERM.

Electric Lighting. General elementary theory; principles of construction and operation of dynamo-electric machines, systems of lighting, types of machines and other practical management. Four hours a week.

Electric Wiring. Lectures and recitations on the principles and methods of wiring for light and power; rules and regulations; plans and specifications. Four hours a week.

Shop Work. Simple pieces of apparatus, binding posts, switches, etc. Four hours a week with no credit.

Plant Duty. Care and operation of college and city stations. One night a week each.

Free-hand Drawing. Three hours a week.

Mechanical Drawing. Copy work from engine and machine drawings. Three hours a week.

Mathematics. Four hours a week.

SECOND YEAR.

FIRST TERM.

Electricity. Lectures with references and rectitations upon electrical engineering. Four hours a week.

Electric Railway (or equivalent). Recitations upon general principles and practical aspects; plans and specifications. Four hours a week.

Shop Work. Construction of simple laboratory apparatus. Four hours a week, no credit.

Mechanical Drawing. Working drawings and plans of machinery from actual parts. Three hours a week.

Plant Duty. Care and partial supervision of college and city stations; trimming and testing lamps. One night a week each.

Seminary. Investigation of assigned topics; written reports. One hour each week.

Mathematics or Chemistry. Four hours a week.

SECOND TERM.

Electricity. Alternating and polyphase currents. Four hours a week.

Electricity. Absolute measurements in electricity and magnetism. Class work two times a week. Laboratory six hours a week.

Shop Work. Miscellaneous construction work; design and construction of small motors and dynamos. Four hours a week, no credit.

Mechanical Drawing. Same as preceding term. Three hours a week.

Plant Duty. Same as preceding term.

Seminary. Same as previous term. One hour a week.

Mathematics or Chemistry. Four hours a week.

THIRD TERM.

Electricity, Testing dynamos for characteristics, efficiency, and regulation. Lectures two times a week. Laboratory six hours a week.

Electricity. Electrical transmission of power. Four hours a week.

Shop Work. Same as preceding term. Four hours, no credit.

Mechanical Drawing. Same as last term. Three hours a week.

Plant Duty. Same as preceding terms.

Seminary. Same as preceding terms. One hour per week.

Mathematics, or an individual investigation. Four hours a week.

For the present there will be no charge for electrical laboratory, but students will be held responsible for all breakage and damage. The only charge for students in electrical engineering will be five dollars per term, the regular contingent fee. Those who are not electrical students, but who wish to take mechanical drawing, may do so on the payment of one dollar per term in addition to the contingent fee.

Any one wishing to spend less time than two years will be required to pursue the course regularly so far as he goes. New light is given, and new opportunities appear very often after one year spent in the pursuit of this work. Inquiries concerning the course will receive prompt attention.

CHEMISTRY.

PROFESSOR SYLVESTER. ASSISTANT, T. H. SHELDON.

In this department the following courses are offered:

1. Elementary Inorganic Chemistry.

This course extends over two terms and requires no preliminary study of the subject. The instruction consists of lectures, recitations, and laboratory experiments. Each student is assigned a desk in the laboratory, and performs for himself, under the constant direction of the instructor, the experiments described in the text. Many additional experiments of a more difficult kind are performed by the instructor upon the lecture table.

The aim throughout the course is to bring before the student such facts and phenomena as will enable him to clearly understand the fundamental laws of chemical science. Attention is also directed to the practical application of chemistry in the various arts and sciences. The subject is a recognized study in all courses, in the Sophomore year.

Text-book: Remsen's Introduction to the Study of Chemistry (Briefer Series); Remsen's Chemical Experiments.

Four hours fall and winter terms.

2. Qualitative Analysis.

This course embraces a systematic study of those reactions which are most often employed in detecting the presence of the more common bases and acids. The instruction is, for the most part, carried on in the laboratory, where the student is trained in the practical analysis of various substances, proceeding from those which are easily soluble in water and acids, to those which are insoluble, and to alloys and complex mixtures.

Open to those who have had Course 1.

Text-book: Noyes' Qualitative Analysis.

Four hours spring term.

3. Quantitative Analysis.

This course offers thorough training in the quantitative determination of inorganic acids and bases. The work in the first term is gravimetric, and in the second term volumetric. The student is trained in the various processes of weighing, preparation of substance in proper form for gravimetric determinations, preparations of standard solutions, chemical calculations, etc. As wide a range of analysis will be undertaken as time permits.

Open to those who have had Courses 1 and 2.

Text-book: Talbot's Qualitative Analysis.

Four hours fall and winter terms.

4. Inorganic Preparations.

This course is designed for those who, having taken Course 1, desire to acquire greater familiarity with the methods of preparation of the more common inorganic substances met with in laboratory work. A large number of such substances will be made by each student, the particular compound selected being chosen because of some special interest in themselves, or as illustrating some general process in their preparation.

Along with the work in the laboratory, lectures will be given once a week reviewing the subject of inorganic chemistry, and especially emphasizing the class similarities of the elements as grouped by the periodic law.

Open to those who have had Course 1.

Text-book: Thorp, Inorganic Chemical Preparations. Three hours spring term.

5. Organic Chemistry.

This course is intended to be an introduction to the study of organic chemistry, and is designed especially for those who intend to enter upon advanced study of chemistry, or upon biological or medical courses. It embraces an elementary study of the more common compounds of carbon, special attention being directed to the classification of such substances, and to a clear presentation of their structure.

Open to those who have had Course 1.

Text-books: Remsen's Organic Chemistry; Orndorff's Laboratory Manual.

Four hours fall term.

6. Physiological Chemistry,

This course is especially arranged for such students as have the profession of medicine in view. It is, in general a continuation of Course 5, in which special attention is given to a consideration of such substances as possess physiological significance, or toxicological properties.

In the laboratory, the work consists of water analysis, of the chemical examinations of various animal products, such as blood, urine and stomach fluids, and of chemical tests for various poisons. It is the aim of the course to give practical experience in such chemical examinations as are commonly demanded in medicine, and to make them intelligible to the student from the chemical standpoint.

Open to those who have had Courses 1 and 5.

Four hours winter and spring terms.

The chemical department has been given all of the space on the second floor of the center building; and thus enlarged, it will be amply provided with the desk room necessary for carrying on the various courses in a satisfactory manner. When fitted up for use, it will include a general laboratory for elementary work, an analytical and an organic laboratory, weighing room, gas analysis room, two stock rooms, lecture room, private office and laboratories.

The laboratories are furnished with gas, water and electricity, and the department is well equipped with apparatus and appliances sufficient for carrying on the courses outlined above.

MODERN LANGUAGES.

KATE CRANZ, ASSOCIATE PROFESSOR.

GERMAN.

The entire course offered in German covers a period of four years. The first two years are required of all students in the Philosophical and Scientific Courses. Two courses are offered as electives—a year of critical reading with conversation, and a year of Composition with Conversation. Only one course is offered each year, the courses alternating. The course in composition and conversation will be offered in 1900–1901.

PREPARATORY GERMAN.

First Term—Grammar with Written Exercises, five hours per week.

Second Term—Grammar two hours per week; Translation, three hours per week.

Third Term—Translation, five hours per week.

COLLEGIATE GERMAN.

First Term—Narrative Prose, four hours per week.
Second Term—Narrative Prose, four hours per week.
Third Term—Selections from Lessing, four hours per week.

ELECTIVE GERMAN.

- 1. A study of Scheffel's Ekkehard and Gœthe's Faust, two hours per week throughout the year; Conversation, two hours per week througout the year.
- 2. Composition, two hours per week throughout the year; Conversation, two hours per week throughout the year.

The course in Conversation is open to all students who have finished the first two terms.

FRENCH.

The course in French is required of all students in the Philosophical and Scientific Courses.

First Term—Grammar and Written Exercises, four hours per week.

Second Term—Narrative Prose, four hours per week. Third Term—Narrative Prose, four hours per week. Electives will be offered in this department later.

ORAL RHETORIC AND ORATORY.

ANITA M. KELLOGG, B. E., ASSOCIATE PROFESSOR.

The work in this department is intended to accomplish two objects: first, to give the student command of Spoken English and the ability to read English easily and clearly at sight; second to develop any special talent he

may possess for Interpretation, Public Speaking, Debate, Declamation, Dramatic Reading and Impersonation.

The required work consists of two consecutive terms taken during the College Preparatory Course, followed by two terms of Elective work chosen from the list offered below to college students.

Beginners must furnish evidence of having accomplished some work in the following branches: English Grammar, Written Rhetoric and Literature. For this reason students are advised to defer the work in this department until their second year Preparatory.

PREPARATORY COURSE.

First Term.—Mechanism of Voice,—Anatomy, Physiology and Hygiene of the Vocal Organs,—Breathing,—Gymnastics,—Voice Development and Modulation,—Fundamentals of Position and Gesture.

Second Term.—Thought Analysis,—Reading by Ideas,—Prepared Selections,—Principles of Criticism,—Reading aloud from newspapers and magazines at sight,—Discussion of Current Topics,—Public Speaking.

COLLEGIATE COURSE.

Students are advised not to enter this course before their second year in college. A foundation of general information and some special work in Rhetoric, Language, Literature, General History, Logic, Political Economy and Psychology are essential to success in this study. The aim of this course is first: to prepare the student for acceptable Public Speaking, Debate, Argument, and Oratory; second, to give him an opportunity to study, if he so desire, along the following lines: Declamation, Recitation and Dramatic Action.

The course is divided into three terms devoted to Public Address, and three terms devoted to Elocution and Action. The student is expected to make his choice from the list of Electives and to arrange his work, as nearly as may be, to take two or three consecutive terms in or to secure to himself his natural development in logical, progressive utterance.

COLLEGE ELECTIVES.

- a. 1. Conversation and Discussion leading to Prepared Addresses.
- 2. Memoritur and Extempore Speaking, leading to. Debate.
- 3. Oral Debate and Argumentative Speech. Orations.
- b. 1. Memoritur Rendering of Dramatic Recitations. Declamations.
- 2. Melody of Voice, Rhythm, Interpretation, Reading.
- 2. Dramatic Rendering, Monologues, Plays, Character Sketches.

There is also offered an Elective in Public Debate. This will be under the charge of three members of the Faculty, the Professors of Political Economy, of English and of Oral Rhetoric and Oratory.

In connection with this department there is a well-organized Dramatic Club which gives several public performances during the season, some in the auditorium, others in the Opera House. Students are eligible to membership in this club after two terms' work in this department.

VOCAL AND INSTRUMENTAL MUSIC.

JAMES PRYOR McVEY AND NELLIE H. VAN VORHES, INSTRUCTORS.

The Board of Trustees have recently added a course in music without determining precisely what its relation to the other departments should be. This course for the present is as follows:

- a. Chorus and Sight Reading.
- b. Voice Culture.
- c. Piano and Theory.

Under the first, the work is distributed into elementary instruction on the lines and spaces as representing sounds; notes as representing quality; the clefs, rhythm, the diatonic major scale. Further lessons in dictation in connection with blackboard exercises for the purpose of familiarizing the student with the simples succession of tones and rhythmic form. Next the interval system. Here progressive exercises are used in order to familiarize the pupil with the various intervals, and particular attention is given to correct intonation and purity of tone. Finally, the theoretical and practical development of the major and minor scales, followed by exercises in the use of both modes.

With students of the second grade the matter in the first is recapitulated. This is followed by solfeggio exercises in two parts on the compositions of ancient and modern masters. Pupils of the third grade study three and four part compositions in which special stress is laid on the acquisition of a correct pronunciation of both vowel and and consonant sounds.

Under the head of Voice Culture, instruction is given upon the correct position while singing; the position of

the mouth, tongue and larynx; the manner of attacking and leaving a note; the manner of forming pure notes in the different registers, and of connecting tones without slurring. Next in order are respiratory exercises in which the pupil is taught how to acquire a long, noiseless and easy breathing by slow inhalations and exhalations. These are followed by exercises in scales, runs, trills and other embellishments. The laws of expression as set forth in the words of old and modern masters are also studied. Last in order is the expression of vowel and consonant sounds. The pupil is taught how to pronounce distinctly without injuring the purity of the vocal tones.

PIANO.

The advance of the pupil on this instrument beginning with the simplest elements and passing to the most difficult selections is so gradual that it is scarcely possible to indicate it by grades. He is, however, always provided with exercises suited to his advancement and to the skill already attained. In this way his progress is continued and uninterrupted as long as he continues to study. It is, therefore, not deemed necessary to indicate here specifically the exercises that will be from time to time put into his hands. It can not be too strongly urged upon those who desire to become proficient that they must act upon the motto, Practice, Practice, Practice.

All the pupils in this department are required to take the complete course in Harmony contained in classes A and B of Broekhoven's System of Harmony. The requirement for the pupils in vocal music is limited to Class A. Students' recitals will be given in the college chapel each term, in which all who are qualified will be expected to take part. The value of such practice need not be dwelt on here.

With a view to encouraging the systematic study of music it may be taken as an elective on the same conditions as those provided for other electives. Music, if properly studied, has an educational value nearly or quite equal to that of any other branch. But it is of far less importance to be a fine player than an intelligent judge of good music. Those who wish to become performers will be accommodated as far as possible, but the chief attention of the teachers will be directed towards the attainment of genuine musical culture.

Students who have had three years of lessons on the piano, two per week, and one of theory, or an equivalent, may be excused from all language study in the Preparatory Department. Musical theory shall constitute one study and may be pursued as long as the student desires to do so. Those who take two lessons per week in instrumental music or vocal training may receive credit for 75 hours' elective work per year. A good knowledge of English will be insisted on. Those who attain a sufficient degree of proficiency in music may receive a certificate in addition to their diploma.

The following books are recommended for study, or at least for careful perusal:

Among the text-books used will be Behnke's Mechanism of the Human Voice; Behnke & Browne's Voice, Speech and Song, and The Child's Voice; Elson's German Song and Song Writers; Fay's Music Study in German; Fetis's Music Explained to the World; Goodrich's Music as a Language, and Complete Musical Analysis; Hand's Aesthetics of Musical Art; Upton's Standard Operas and Oratorios; Biographies of the Great Musicians by Nohl and by Huffeer; Ritter's History of Music; Musical Acoustics by Broadhouse; Grove's Dictionary of Music and Musicians, etc.

A comparison of the above course with any other in the country will show that it is surpassed in excellence and thoroughness by none and equaled by few. Those who complete it will not only have an intelligent comprehension of music both in itself and its relation to the other arts of civilization, but will possess an excellent education in addition. A musical literary club meets once in two weeks for the study of the literature and history of music.

DRAWING AND PAINTING.

SARAH STINSON, INSTRUCTOR.

It is the aim of this department to give a practical knowledge of art, and to lead pupils, through the cultivation of their observing powers, to an appreciation and love of the beautiful as found in nature and expressed in the handiwork of man. As form, study and drawing furnish the foundation this course of instruction, special attention is given to that part of the work. No pupil will be allowed to take painting who has not had at least three terms of drawing. Charcoal is the medium chosen, and all drawings must be made from the object. Pencil and pen and ink may be used in advanced grades. Instruction in out-of-door sketching will be offered during the spring term to those who have completed five terms in charcoal drawing.

The course of instruction is as follows:

First Grade—(1) Outlines from geometrical solids. (2) Shaded studies from geometrical solids. (3) Outlines and shaded studies from still life. (4) Outlines and shaded studies from features.

Second Grade—(1) Outlines for elementary blocked heads. (2) Detached features of the face, hands and feet in outline. (3) Detached features of the face, hands and feet shaded.

Third Grade—(1) Outline from advanced blocked heads. (2) Masks in outline. (3) Masks shaded. (4) Busts in outline and shaded the size of the original.

Fourth Grade—(1) Outline from life. (2) Shaded studies from life.

PAINTING.

First Grade—Still life objects, single and in groups. Second Grade—Still life in draperies.

Third Grade—(1) Studies from nature. (2) Studies from life.

COMMERCIAL DEPARTMENT.

C. M. COPELAND, PRINCIPAL,

This work is arranged to meet the large demand on the part of regular as well as special students for instruction in the commercial studies. It is recognized that a course in this department is not all of an education, but a very useful and important part. The regular student has an opportunity during his college course to obtain a knowledge of business rules and customs which will be invaluable to him when he afterwards goes into business or enters a profession. The special student, who takes only this work, has the same advantages of library, reading room, literary societies, gymnasium, college associations, etc., as regular students and may enter any of the regular preparatory or college classes without extra charge. Moreover, the special student finds contact with a large student body in the general college work helpful and inspiring.

Commodious rooms in the new building have been assigned to this department, and they have been well equipped for the work. The bank, and commission, wholesale, and railroad offices in the office department are models in

arrangement, fixtures, and supplies. Here students receive the training that comes from filling the principal as well as the subordinate positions in such offices. In the bank they pass from the position of collection clerk to that of book-keeper, teller, and cashier. In the wholesale office they are shipping clerk, book-keeper and manager; in the railroad office, agent and clerk; in the commission office, receiving clerk, shipping clerk, book-keeper, and manager.

All the work in this department is elective for which college credit is allowed on any of the regular courses. Diplomas will be granted only to students who have had the three terms of English, two of U. S. History, and one of Civics required in the first year preparatory or their equivalent. This work can be taken in connection with the courses in Business and Stenography. Those not wishing a diploma will be allowed to take up the commercial work, without these extra studies, provided they can give evidence that they are competent to do so. Only excellent students should take the courses in Business and Stenography at the same time as experience teaches that no others can do the required work well.

COURSE IN BUSINESS.

1. Theory of Accounts. Five hours per week for two terms. Beginning classes are formed each term. Ample practice is given in the systems of accounts used in the various kinds of business from retailing to modern banking. It is the aim of this course to give the student a wide acquaintance with business methods and to secure proficiency in opening and closing books, journalizing, rendering statements, tracing errors, analyzing accounts, and drawing business papers. This course prepares teachers to meet the requirements in high schools.

- 2. ACTUAL BUSINESS AND BANKING. Five hours per week for one term and open to students who have taken Theory of Accounts. This work is on the inter-collegiate communication plan, and the transactions are with students of other colleges. The business correspondence growing out of purchases, sales, remittances, collections, making settlements and adjusting accounts, carried on with a number of advanced students in other cities, each one anxious to maintain a good record for his school, must certainly develop a high grade of efficiency in all the student's work.
- 3. COMMERCIAL LAW. Three hours per week in the winter term. This work deals in a general way with the subjects of contracts, agency, partnership, corporations, sales, and negotiable paper, and is intended to give students a practical acquaintance with the fundamental principles of each.
- 4. Commercial Correspondence and Business Forms. One hour per week in the winter term.
- 5. BILLS AND NOTES. (Not required.) Two hours per week in the spring term.

STENOGRAPHY AND TYPEWRITING.

MABEL K. BROWN, INSTRUCTOR.

It is the aim of this department to teach the subject thoroughly rather than to turn out so-called stenographers in a short time. Special attention is given to the elementary principles of the art, as it is believed this method leads to the greatest saving of time in the end. The time spent in completing the course depends upon the ability and industry of the student. Many find it to their advantage to study three terms, or ten months, but the course can be finished in less time.

While the demand for stenographers is increasing, the standard of proficiency is steadily rising. In order to obtain and hold a good position, the stenographer must be able not only to take notes with rapidity, but to transcribe them intelligently. No person who is deficient in English can hope to be able to do this, no matter how great his skill as a stenographer. The courses in English in this institution are open to all students of stenography, without extra charge, and those who need instruction in these branches are urged to avail themselves of the opportunity offered.

In typewriting the student's first efforts are directed to acquiring a correct method of fingering. This is followed by practice leading to high speed. Business and legal forms are studied, and as soon as practicable the student is required to transcribe his notes taken from dictation. Punctuation and the correct use of capitals are taught throughout the course.

PENMANSHIP.

N. R. CUNIUS, INSTRUCTOR.

It is well known that good writing is a desirable accomplishment for any one and indispensable for those who would succeed as book-keepers or stenographers. Accordingly the classes in Penmanship are open to all students, and those in the commercial department, who do not write a good hand are required to take regular instruction. To develop plain writing with an easy rapid movement is the constant aim in all exercises. Ornamental work will be given to advanced students who desire it.

EXPENSE.

In addition to the contingent fee of \$5.00 there is a special fee of \$5.00 for Business, \$5.00 for Stenography and Typewriting, and \$1.50 for Penmanship, per term. The books for the entire course in Stenography do not cost more than \$2.00 and in the Business course not more than \$10.00. Those who complete either course as outlined above will be granted a certificate for which a fee of \$3.00 may be charged.

Courses of Study

IN

Collegiate Department.

In the following scheme, the figures in parentheses indicate the number of exercises per week. It is believed that the four courses given below are equal in educational value, and all require 2500 hours of class-room work for their completion. The required work in each course is about 1500 hours. Each student is expected to select the remaining 1000 hours from the electives offered in the various departments.

REQUIRED SUBJECTS FOR THE DEGREE OF BACHELOR OF ARTS.

FRESHMAN YEAR.

Fall Term—Greek (4); Latin (4); Solid Geometry (4); Political Economy (2).

Winter Term—Greek (4); Latin (4); Algebra (4); Political Economy (2).

Spring Term—Greek (4); Latin (4); Plane Trigonometry and Surveying (4).

SOPHOMORE YEAR.

Fall Term—Greek or Latin (4); Chemistry (4); European History (3).

Winter Term—Greek or Latin (4); Physiology (4); Chemistry (4).

Spring Term—Greek or Latin (4); Biology (4); European History (3).

JUNIOR YEAR.

Fall **T**erm—English Literature (4); Psychology (3). Winter **T**erm—Psychology (3). Spring **T**erm—English Literature (4).

SENIOR YEAR.

Fall Term—Advanced Botany or Geology (4). Winter Term—Logic (4); Astronomy (4).

REQUIRED SUBJECTS FOR THE DEGREE OF BACHELOR OF PHILOSOPHY.

FRESHMAN YEAR.

Fall Term—Latin (4); German (4); Solid Geometry (4); Political Economy (2).

Winter Term—Latin (4); German (4); Algebra (4); Political Economy (2).

Spring Term—Latin (4); German (4); Plane Trigonometry and Surveying (4).

SOPHOMORE YEAR.

Fall Term—French (4); Chemistry (4); European History (3).

Winter Term—French (4); Chemistry (4); Physiology (4).

Spring Term—French (4); Biology (4); European History (3).

JUNIOR YEAR.

Fall Term—English Literature (4); Psychology (3). Winter Term—Psychology (3). Spring Term—English Literature (4).

SENIOR YEAR.

Fall Term—Advanced Botany or Geology (4). Winter Term—Logic (4); Astronomy (4).

REQUIRED SUBJECTS FOR THE DEGREE OF BACHELOR OF SCIENCE.

FRESHMAN YEAR.

Fall Term—Latin (4); German (4); Solid Geometry (4); Political Economy (2).

Winter Term—German (4); Latin (4); Algebra (4); Political Economy (2).

Spring Term—German (4); Latin (4); Plane Trigonometry and Surveying (4).

SOPHOMORE YEAR.

Fall Term—French (4); Chemistry (4); Trigonometry (4); European History (3).

Winter Term—French (4); Analytical Geometry (4); Chemistry (4).

Spring Term—French (4); Biology (4); European History (3).

JUNIOR YEAR.

Fall Term—Physics or Mechanics (4); English Literature (4).

Winter Term—Physics (4); Psychology (3). Spring Term—Physics (4); Psychology (3).

SENIOR YEAR.

Fall Term—Advanced Botany or Geology (4). Winter Term—Logic (4); Astronomy (4).

REQUIRED SUBJECTS FOR THE DEGREE OF BACHELOR OF PEDAGOGY.

FRESHMAN YEAR.

Fall Term—U. S. History (4); Solid Geometry (4); Political Economy (2); A Foreign Language (4).

Winter Term—U. S. History (4); Algebra (4); A Foreign Language (4); Political Economy (2).

Spring Term—U. S. History (4); Plane Trigonometry and Surveying (4); A Foreign Language (4).

SOPHOMORE YEAR.

Fall Term—A Foreign Language (4); European History (3).

Winter Term—A Foreign Language (4): Physiology (4).

Spring Term—A Foreign Language (4); Biology (4); European History (3).

JUNIOR YEAR.

Fall Term—A Foreign Language (4); English Literature (4); Psychology (3).

Winter Term—A Foreign Language (4); History of Education (3); Elocution (3); Psychology (3).

Spring Term—A Foreign Language (4); English Literature (4); History of Education (4); Elocution (3).

SENIOR YEAR.

Fall Term—Psychology (3); English Literature (4). Winter Term—Logic (4); Astronomy (4). Spring Term—Science of Education (4).

PREPARATORY DEPARTMENT.

ELI DUNKLE, PRINCIPAL.

This department is designed to prepare students for the regular courses of the college. Students are also received who wish to pursue elementary studies, even though they may have no intention of entering one of the higher courses.

Candidates for admission to this department must furnish satisfactory evidence of good character, and must pass examination in Geography, Arithmetic, English Grammar, Elementary U. S. History, and all studies of the courses lower than those which they wish to pursue. Persons who have certificates from county examiners in Ohio will be admitted without examination in the subjects named above. But students who expect to graduate from the Normal department must give evidence that they are thoroughy familiar with the common school branches.

There are four preparatory courses, Classical, Philosophical, Scientific, and Pedagogical, each requiring three years for completion, and each leading to a corresponding course in the collegiate department. For the benefit of

teachers and others who wish a more thorough preparation for their work, classes in Arithmetic, Elementary Algebra, and English Grammar will be organized at the beginning of each term.

SUMMER SCHOOL.

It is customary for members of the Faculty to conduct a summer term. This term usually begins on the first Monday after commencement. At the present time it is, however, impossible to make definite announcement for the summer of 1901. Should such a term be provided for, it will be announced in a special circular.

THE COURSES OF STUDY IN DETAIL.

LATIN.

FIRST TERM. Collar and Daniell's Beginner's Latin Book.

SECOND AND THIRD TERMS. Rolfe & Dennison's Junior Latin Book. Especial stress is laid on inflections and composition.

SECOND YEAR. Cicero's Orations. The orations usually read are the four against Catiline, Pro Archia, Pro Marcello, and Pro Ligario. A careful study of forms and syntax is an important part of this year's work.

THIRD YEAR. Vergil's Aeneid, Books I-VI. Grammar reviews, scansion and mythology. Collar's Latin Prose Composition.

GREEK.

FIRST AND SECOND TERMS. White's Beginner's Greek Book, with particular reference to inflections and sentence-writing.

THIRD TERM. Xenophon's Anabasis. Grammatical reviews and translation into Greek of easy prose.

FOURTH TERM. Anabasis continued through the fourth book. Jones' Greek Prose Composition.

FIFTH AND SIXTH TERMS. Homer's Iliad, Books I-V, omitting the Catalogue of Ships in Book II. Jones Greek Prose. In this connection considerable time is given to the study of the Epic dialect.

ENGLISH.

FIRST TERM. Herrick and Damon's Composition and Rhetoric to Part III.

SECOND TERM. American Literature — Selections from Irving, Bryant, Whittier and Poe.

THIRD TERM. American Literature continued—Selections from Lowell, Longfellow, Emerson, Hawthorne and Holmes.

FOURTH TERM. English Literature—Selections from Shakespeare, Milton, Burke, Addison and Dryden.

FIFTH TERM. English Literature continued—Selections from Johnson, Wordsworth, Macaulay, George Eliot and Coleridge.

SIXTH TERM. Herrick and Damon's Composition and Rhetoric completed.

GERMAN.

FIRST TERM. Cook's Otto's German Grammar, and Written Exercises.

SECOND TERM. Cook's Otto, Written Exercises, and translation of easy narrative prose.

THIRD TERM. Translation of easy narrative prose.

MATHEMATICS.

FIRST TERM. Milne's Essentials of Algebra, entire text-book.

SECOND TERM. Wells' Essentials of Algebra, first nineteen sections.

THIRD TERM. Wells' Essentials of Algebra completed. FOURTH TERM. Chauvenet's Plane Geometry, at least four books.

PHYSICS.

Two terms, 5 hours per week. Recitations 3 times a week. Laboratory work 4 to 6 hours per week, 3 hours in the laboratory being equivalent to one recitation.

Carhartdelz & Chute's Physics will be used as a guide for the class work. Full notes are taken in the laboratory, which are criticized, corrected and copied into a permanent book. The object is to teach laboratory methods of work and give opportunity to the student to acquire more or less skill in handling apparatus, while the recitation periods are devoted to the acquisition of the elementary principles of the subject.

PHYSICAL GEOGRAPHY.

This subject is required in all courses. The Eclectic Physical Geography is used as a text-book.

ZOOLOGY.

Considerable field work is done, and, in addition, preserved marine types are made use of for dissection. Students are expected to spend some time in the zoological museum. Chapin and Rettger's Elementary Zoology and Laboratory Guide is the text-book used.

PHYSIOLOGY.

The text-book is Martin's Human Body, Briefer Course. The aim is to give a good general knowledge of Anatomy and Hygiene and of the functions of the different organs of the body. More or less laboratory work will be done.

BOTANY.

Field and laboratory work are a leading feature in this course. Each student will prepare a herbarium of not less than forty plants. Gray's School and Field Book of Botany is the text-book.

U. S. HISTORY.

Two Terms: The first of three hours per week, and the second of four hours per week. Text-book, either The Student's American History by Montgomery, or Channing's Student's History of the United States.

CIVICS.

The fundamental principles of the subject are carefully explained, while at the same time the practical operation of the different local and state systems are compared. Especial attention is given to the government of Ohio. The growth of our national system is thoroughly investigated.

EUROPEAN HISTORY.

This subject is pursued three terms in the Second Preparatory Year.

FIRST TERM. Botsford's History of Greece.

SECOND TERM. Allen's Short History of the Roman People.

THIRD TERM. Montgomery's Leading Facts of English History.

The aim is to give the student a general acquaintance with the leading persons, and the institutions, political and religious, with the literary and artistic movements; in general with the progress of civilization in its broader aspects. The method employed will be the text-book, references to more comprehensive works, essay writing, map drawing, and lectures by the teacher.

PEDAGOGY.

FIRST TERM. Gordy's Psychology.

SECOND TERM. Quick's Educational Reformers.

THIRD TERM. Fitch's Lectures on Teaching.

DRAWING.

Required in all four courses. Two hours in the studio are considered equivalent to one recitation.

ELOCUTION.

Required work in all courses.

FIRST TERM. Physical culture, development of the voice, inflection, phrasing and expressive reading, using Curry's Classic Selections as a text-book.

SECOND TERM. Development of the voice, articulation and pronunciation, with use of the same text-book.

Conspectus of Preparatory Courses.

Genung's Rhetoric..... Plane Geometry..... Greek Prose Composition... Latin Prose Composition... Homer's Iliad

Second Term.

Gicero's Orations		Cicero's Orations		Vergil Latin Prose Composition Exychology		Vergii		Vergil Latin Prose Composition 5 Methods of Teaching
Cicero's Orations	erm.	Cicero's Orations	First Term.	Vergil Latin Prose Composition 5 German Elementary Physics	l'erm.	Vergil Latin Prose Composition 5 German Elementary Physics	erm.	Vergil
Cicero's Orations	Third T		THIRD YEAR-	Vergil Latin Prose Composition. 6 German Elementary Physics	Second	Vergil Latin Prose Composition 5 German Elementary Physics	Third T	Vergii
Cicero's Orations		வவவவ		Vergil Latin Prose Composition 5 Anabasis Greek Prose Composition 5 Elementary Physics		Vergil Latin Prose Composition Homer's Iliad Greek Prose Composition 5 Greek Prose Composition 5 Elementary Physics		Vergil
	Cicero's Orations	Cicero's Orations	Cicero's Orations	Cicero's Orations	Cicero's Orations	Cicero's Orations	Cicero's Orations	Cicero's Orations

WITHE figure after the name of a study indicates the number of recitations per week in that subject.

List of Students.

COLLEGIATE DEPARTMENT.

CLASS OF 1899.	
Beau, L. Gardner	Athens
Bennett, Gilbert Abel	
Bennett, Newman Hall	
Henson, Clarence Cherrington	
Hooper, Dollie	
Houston, Virginia Miller	
Kaler, Charlotte Rannells	
Kohberger, Henry Paul	Warwick, New York
Koons, Stella Irene	Columbus
Morse, Bert Edmund	Athens
Roberts, John Ellis	Lysander
SENIORS.	
Bahrman, Harry Rockafellar	New Milford N. V.
Bryson, Charles Harvey	
Cline, Cecil Roy	
Crane, William I	
	Dayton
Gibson, Elza Goodspeed	Athens
Gibson, Elza Goodspeed	Athens
Gibson, Elza Goodspeed	AthensSouth PerryToledo
Gibson, Elza Goodspeed. Hastings, Laura Matilda. Irwin Rochester. MacLane, Arwilla. Matheny, Charles Morris	Athens Athens South Perry Toledo Athens
Gibson, Elza Goodspeed. Hastings, Laura Matilda. İrwin Rochester. MacLane, Arwilla. Matheny, Charles Morris Sheldon, Thomas Henry.	Athens Athens South Perry Toledo Athens Athens
Gibson, Elza Goodspeed. Hastings, Laura Matilda. Irwin Rochester. MacLane, Arwilla. Matheny, Charles Morris	Athens Athens South Perry Toledo Athens Athens

JUNIORS.

Batterson, Mayme Alice	Portsmouth
Black, Margaret Geneva	Glen Ebon
Blackwood, Nelle Rosamond	Athens
Brown, Minnie Frances	Athens
Bryson, Maurice Mason	Glouster
Clayton, David Roy	
Evans, Jacob Claire	Athens
Fuller, Nellie Mary	
Horn, Bernice LeRoy	
Kaler, Mary Engle	
Kurtz, Anna Elizabeth	
Riley, Martina Mary	
Townsend, Mary Allen	
Tullis, Flora Blanche	
Welch, Philip Johnson	
White, Gershom Franklin	
Wickham, Mabel Leona	
Wilson, Blanche Nell	
Witman, Dwight Newcomb	
, 3	

SOPHOMORES.

Bishop, Robert Francis, Jr	Athens
Bradshaw, Alice May	Athens
Caldwell, George Washington	
Clements, Jerry Riley	
Conner, May Sherwood	
· · · · · · · · · · · · · · · · · · ·	
Copeland, William Franklin	
Dixon, Floyd	Athens
Douth, Ida Helen	
Garber, Ginevra Edna	Athens
Harris, Bess Putnam	Athens
Henry, Francis Beardsley	
Holcomb, Anselm Tupper, Jr	
Irwin, Algernon Charles	South Perry
Johnston, Fred Preston	
Lamb, George Franklin	Greencastle
McLaren, James Walter	
Morgan, Thurman Leroy	
Neff, Mary Belle	

Neff, Nora	Anvil
O'Bleness, Mame	Athens
Paine, Howard Sheperd	
Pickering, Nellie Marcus	Athens
Pilcher, Benjamin Luther	Canaanville
Reah, Mary	
Riley, Ethel Eleanor	
Scott, Grace Greenwood	Athens
Scott, Paul Raymond	Athens
Sheldon, Walter Rice	Athens
Wood, James Perry, Jr	
Wood, Mary Ellen	
, ,	

FRESHMEN.

Bean, Harry Elijah	Athens
Beckler, Herbert Sheldon	Athens
Biddle, Asher Cadden	Fisher
Black, Flora Miriam	
Brunner, Henry	Portsmouth
Cable, Will Ransom	Athens
Cave, Edward Ulysses	Lancaster
Conner, Flora Terhune	Athens
Cornwell, Sadie Tamzon	
Coultrap, Floyd Erie	Athens
Courtright, Harry Frederick	
Craig, Thomas Watson	
Dean, Minnie Foster	Athens
Dew, Pearley Leroy	Athens
Emory, Charles Merton	Flat
Glazier, Lena Blanche	Athens
Haddox, Corydon Haven	Athens
Hambleton, Antrum Marion	Hooksburg
Hambleton, Benjamin Franklin	Athens
Headley, Sanford Alphonso	Jacksonville
Kirkendall, Emmett Royal	
Lapp, George Harlan	Will's Creek
McCord, Horace Minor	
McGirr, Mabel	New Lexington
Matheny, William Martin	Shade
Micklethwait, Joseph Timmond	Portsmouth

Mitchell, John AndrewMurray City
Mutchler, Finley GuyRutland
Nease, Nannie LouisePoint Pleasant, W. Va.
Pickering, Fred StewartAthens
Prushing, David ThompsonCommercial Point
Roberts, PearlMillfield
Seeds, Otto FentonCommercial Point
Sheppard, Carl Dunkle
Smith, Thomas Maynard
Sprague, Jennie EdythMillfield
Sullivan, Fred TWarwick, N. Y.
Williamson, Frances
Williamson, Lissa
Winter, Samuel GuyCrooksville
Wood, John VorhesAthens
Zang, Jacob MiltonNewport, Pa.
IRREGULAR AND SPECIAL STUDENTS.
Barker, Jannette Stright
Kaler, Charlotte Rannells, B. PhAthens
Linton, Nancy EFrost
Marlowe Anna Gertrude Toledo
Marlowe, Anna Gertrude
Merwin, Addie TullisAthens
Merwin, Addie Tullis
Merwin, Addie Tullis
Merwin, Addie TullisAthensPaine, Fannie ElizabethJacksonPurdy, Mossie PearlAthensSlattery, Mary LAthens
Merwin, Addie Tullis
Merwin, Addie TullisAthensPaine, Fannie ElizabethJacksonPurdy, Mossie PearlAthensSlattery, Mary LAthens
Merwin, Addie Tullis
Merwin, Addie Tullis
Merwin, Addie Tullis

C1 + T2 1 C1
Clayton, Earle Sloane
Coultrap, Harry Mausfield
De Vore, Rose Elizabeth
Dieterich, William WallacePiketon
Elder, Adam GriggsAthens
Ely, George LeonardWellston
Finsterwald, Homer GrosvenorAthens
Gabbert, Nan MariaPoint Pleasant, W. Va.
Heston, Frank MAmesville
Higgins, Cyrus DowAthens
Hooper, George EldonPleasanton
Hoover, Thomas NathanaelPiketon
Hopkins, Hannah JaneDownington
Howe, Mary BlancheAthens
Hugg, Myrta AurillaRutland
Huntley, Burl EmmettWellston
Imes, Leroy LaneyMarshfield
Lopez, Jose AntonioArecibo, Puerto Rico
McPherson, Joseph ElwynJasper
Mace, James ElwoodBuchtel
Mitchell, William HarveyMurray City
Mohler, Nellie BlancheAlbany
Murphy, Sarah CyrennaMiddleport
Peters, Crissie MaySt. Paul
Peters, Zora MedoraSt. Paul
Place, Benoni AustinQualey
Rickey, Lester
Roach, Clarence Wayne
Robbins, Eva. Mineral
Roberts, William JasonLysander
Robinett, Stephen EdwardMarshfield
Russell, Nettie GertrudeLottridge
Smith, Murray Franklin
Smith, Stanley Emerson
Spencer, Holmes AugustusParkersburg, W. Va.
Steenrod, Estella Wynona
Stiers, Eva MZaleski
Tinker, Fred Huntington
Tuttle, Eugene Vivian
Ullom, Helen Macbeth
Ulmer, Ray FrancisAthens

Waggoner, Chauncey William	Sugar Grove
Walsh, Stella Catherine	Athens
Watkins, Daisy Maud	Logan
White, Ennis Leslie	
Wolfe, Arthur Almer	
Wood, Anna Estella	Smithfield
Yoshisaka, S	
Zimmerman, Emmett Walter	Albany
SECOND PREPARATORY.	
Allen, Helen Sue	Hehhardsville
Allen, Mary Besse	
Arscott, Mary Elizabeth	
Barker, Dolly Beatrice	
Barker, Joseph Frederick	
Bartlett, Harry Guthrie	
Beckler, Harley Eugene	
Bennett, Jesse Edmund	
Biddison, William Tolbert	
Biddle, Cleophas Genevieve	
Biddle, Frank	
Biddle, Nancy Louise	
Bingham, Harry Barker	
Boblitt, Homer Clifford	
Bone, Pinckney S	
Bowman, Charles, Foster	
Brown, Harry	
Carleton, Anna Matilda	
Clendenin, Mattie Lulu	
Clester, William Albert	
Cooley, John Parker	
Cooper, Margaret Maude	
Cuckler, Valca Valentine	
Cunius, Neiman Richard	
Dalton, Ralph Augustus	Athens
Davis, Albert Sylvester	
Dinsmoor, Mid Earl	
Figley, Charles Clifford	
Garber, Mayme	
Graham, Arthur Anson	Bartlett
Gross, Charles William	Athens
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Gross, Fred EdwardAthens
Haddox, Louis HenryAthens
Hawk, Constance Louise
Heston, Eber ForestGlouster
Hewitt, Arthur WilliamMineral
Hope, James GarfieldAthens
Humphrey, William EmersonRutland
Ihle, WaidGreat Bend
Imes, Richard PriceMarshfield
Jones, Albert JohnsonAthens
Jones, Alva BlaucheGlouster
Josten, ArthurAnthony
Josten, James MathisAthens
Juniper, Edward LorenzoNelsonville
Kennard, Minuie Theora
Kennard, Moses HerbertCarbondale
Lash, Florence Alice
McDaniel, Charles Wilbert Starr
McDaniel, John EdmonPomeroy
McLaughlin, George Evert
Matheny, William AldermanBeaumont
Matthews, Lois AlamedaSnnbury
Maullar, Frank ByronGillespieville
Moore, Emmett AugustusAnthony
Morrison, William GuyPleasanton
Motter, Edwin CameronGillespieville
Needham, Fred CoatesAthens
Ogborn, Fred DwightAthens
Pedigo, Clara AliceNelsonville
Perry, William AlbertBeaumont
Peters, Frank MiltonAthens
Pinkerton, Elsie GeraldineAthens
Poston, Frank AltonSiloam, W. Va.
Reading, Laura LorindaShade
Scott, Nellie Rutledge
Stage, William Addison
Swaim, Clement Celsus
Taylor, Lucy MayTappan
Welling, Michael Clifford
Williams, Anna PearlShade
Willis, Eugene Pearle Athens

Willis, Olney Carl
FIRST PREPARATORY.
Andrews, James Garfield
Armstrong, Ada BelleCove
Ayres, Albert Ellwood
Baker, Winifred ClevelandAthens
Beam, ElizaGarden
Bean, Frances Marie
Bennett, John MadisonNelsonville
Bethel, Webb GarfieldAthens
Biddle, Frances LillianFisher
Biddle, James KesterFisher
Bobo, Ola MarieAthens
Botkin, Estella MayTorch
Burgess, Grace JenuieBartlett
Burke, Charles EdmundVigo
Campbell, Eugene GrantHemlock Grove
Christman, George WashingtonJudson
Christman, Jacob
Clendenin, Antoinette JeanAlbany
Climer, JessieVigo
Cook, Alice GertrudeChauncey
Cook, Annie LaurieChauncey
Cox, Clifford ClarenceGillespieville
Cox, Joseph GGillespieville
Crippen, MaudFrost
Cross, Julia BessieRacine
Crossen, Maude BelleAthens
Cullums, Dean Lewis
Daugherty, Edna ClaireTrimble
Davis, MabelBig Run.
Dempster, Lizzie AugustaChauncey
Dillinger, Herbert FranklinLysander
Dinsmoor, Anna
Dinsmoor, Pearl
Dixon, Roy CGillespieville
Drake, Pearl Groe

Druggan, Charles Sumner Chauncey
Dulaney, Harlan HerbertMountville
Dumaree, Charles HenryKnox
Duncan, Byrde RebeccaAthens
Edmundson, Clyde JosephAthens
Farmer, Luke HaysAthens
Finsterwald, Blanche Marie
Finsterwald, Ollie Delle
Francis, Warren FrederickAthens
George, Blanche Hibbard
Gift, Caddius DowHebbardsville
Gillette, Alva RogerMarchmont
Goddard, Archibald HenryHaverhill
Green, Maud MaySand Run
Green, Pearl NashSnowville
Green, Sarah BessieSnowville
Guthrie, AlmaGarden
Guthrie, Joseph ArthurGarden
Haddox, Lillie Athens
Harmon, ClaraCoolville
Harper, Elmer EJackson
Hill, Pearl Dwight
Hixon, Peter Edward
Hollis, CharlesPepper's Station
Hooper, Lulu BellePleasanton
Hysell, WorthyMiddleport
Jack, Jesse WallaceChase
Jacoby, CleolaSand Run
Johnson, Nettie TabithaFisher
Kelley, Alma Frances
Kelley, Lewis Weitzel
Kennard, Mattie EstellaCarbondale
Kennard, Susie Arminta
Kessler, Pearly Alwyn
King, Estella JaneGlouster
Kittle, Frederick FTrimble
Lantz, Elmer HarryTrimble
Lee, William HenryCreola
Linscott, Flossie Edith
Linscott, Nehemiah Warren
Luckett, Sarah LetitiaAlbany
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McCaughey, Charles WilsonFultonham	1
McClannahan, John ClaudiusAthens	S
McVay, LinaHebbardsville	
Mansfield, Blanche MayGuysville	
Mason, Lenna BeatriceTrimble	e
Matheny, Clarence AlbertBeaumon	t
Metcalf, William EdwardCarpenter	r
Miller, Guy DolphusAthens	
Mills, Edward AllenAthens	S
Mosure, Charles FranklinHebbardsville	e
Norton, Willey HigbeySabot Island, Va	
Patterson, Lena Estella	e
Phillips, William RichardAthens	
Pickett, Mary KatherineAthens	s
Poore, JamesBerlin Roads	
Powell, FloraBroadwel	1
Pratt, ViraAthens	s
Preston. Lorenzo PerryAthens	s
Ratcliff, George HowardGillespieville	e
Reeves, Myrtle LorenaSnowville	
Riley, Walter EmmetHul	1
Roach, DonnaAthens	
Robbins, Alfred LewisDundas	S
Robinett, Amanda LouisaAlbany	
Russell, Lena L	
Sergent, Edna MayBuchto	
Sidders, Eva MyrtleAthen	
Sidders, Mabel GlendoraAthen	
Skinner, Bertha MarieBig Rui	
Smith, Henry Charles Stella	a
Stoltz, Alma MaryRushvile	e
Stout, Elmont	d
Turben, EmeryBartlet	t
Waterman, CarrieCoolville	
Weiss, Jessie EstellaAthen	
Welling, James ReedChaunce	y
Whitmore, Charles JudgeBuchte	
Wilkes, Mabel WilhemineRawndale	
Wilson, Anna CowanShade	
Wilson, Edythe MaeNelsouville	e

Wilson, Ellen Veronica	Buchtel
Woodworth, Eugene Earl	
Wrightsel, Bertha EthelNew	Plymouth
Young, Bertha Edna	Glen Ebon
Young, Lulu Elizabeth	
Zimmerman, Marcus Dawes	Albany

COMMERCIAL DEPARTMENT. -

COURSE COMPLETED.

Bean, Elijah Harry (Business and Stenography)	Athens
Bingham, Maud Lavina (Stenography)	Athens
Bishop, Nellie Adele (Stenography	
Brown, Daisy Aldine (Stenography)	
Cornwell, Sadie Tamzon (Business)	
Curtis, Grace Undine (Stenography)	
Garber, Ginevra Edna (Business)	Athens
Gillett, Bertha (Business)	Athens
Gregg, William Rea (Stenography)	
Harris, Bess Putnam (Stenography)	
Hopkins, Hannah Jane (Business)	
Jones, Alva Blanche (Business)	
Josten, Arthur (Business)	
Kennard, Moses Herbert (Business)	
Lapp, George Harlan (Business)	. Will's Creek
Logan, Clade Landen (Stenography)	Athens
Murphy, Sarah Cyrenna (Business and Stenography)	
Perry, John Edmund (Business and Stenography)	_
Pierre, Edith (Business and Stenography)	Buchtel
Root, Edna Elizabeth (Stenography)	
Ross, Eva (Stenography)	
Zimmerman, Emmet Walter (Business and Stenograp)	
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COURSE UNFINISHED.

Arscott, Harriet Stearns	Athens
	Shade
	Sand Run
	Athens

Bell. Bessie Florence	A 41
Brunner, Henry	
Carpenter, Roll Franklin	
Chase, Bertha Ellen	
Clayton, David Roy	
Dalrymple, Marie	
Drake, Winifred Walsh	0
Earhart, John Douglas	
Goddard, Archibal Henry	
Green, Maud May	
Hope, James Garfield	
Horn, Bernice Leroy	
Humphrey, Oren Earl	
Ihle, Waid	
Johnston, Fred Preston	
Josten, James Mathis	
Kessler, Pearly Alwyn	
Keyes, Earl Fenton	Winchester
Matheny, Marie Ethel	Shade
Matheny, Charles Morris	
McCord, Horace Minor	Commercial Point
Mercer, Francis Marion	Hooksburg
Mills, Clara Ginevra	
Mosure, Charles Franklin	Hebbardsville
Mutchler, Finley Guy	Rutland
Paine, Howard Sheperd	Hamden Junction
Peters, Frank Milton	Athens
Pilcher, Benjamin Luther	Canaanville
Robbins, Eva	Mineral
Thompson, Bernard Heatherly	Athens
Welling, Michael Clifford	
White, Gershom Franklin	Malta
Wilson, Edythe Mae	Nelsonville
Wolfe, Arthur Almer	Athens
Wood, James Perry, Jr	
Wood, John Vorhes	
Woodworth, Estella Minerva	
Zimmerman, Marcus Dawes	
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MUSIC STUDENTS.

Armstrong, Ada Belle	Cove
Bethel, McKinley	Athens
Black, Flora Miriam	Glen Ebon
Brown, Elizabeth Ina	Millfield
Cable, Don C	Nelsonville
Chappelear, Emma Ellen	Athens
Chappelear, Hettie Blanche	Athens
Clark, Grace	Glouster
Climer, Jessie	Vigo
Coe, Mary Elsie	
Cornwell, Sadie Tamzon	
Craig, Florence Maude, Ph. B	Athens
Craig, Thomas Watson	Athens
Cuckler, Minnie Luella	
Davis, Edith Louise	Athens
Dempster, Amelia Christine	Chauncey
Dempster, Sadie Lorena	
De Vore, Rose Elizabeth	Nelsonville
Dickason, Clara	Athens
Eaton, Edith Mildred	Athens
Elder, Adam Griggs	Athens
Evans, Jacob Claire	Athens
Francis, Millie Belle	Athens
Fuller, Nellie Mary	
Fulton, Lula	Athens
Galaway, Octa Dell	Mt. Blanco
Glazier, Lena Blanche	
Irwin, Algernon Charles	South Perry
Irwin, Rochester	South Perry
Hines, Hattie May, A. M.	
Hooper, Olah Angell	Athens
Hope, Ella	Athens
Jacoby, Cleola	Sand Run
Jones, Albert Johnson	
Juniper, Edward Lorenzo	
Millikan, Agnes Dyson	Athens
Moore, Helen Louise	
Neff, Mary Belle	
Neff, Nora	Anvi-

Paine, Fannie Elizabeth	
Parker, Emmett	
Parker Everett	
Pedigo, Clara AliceNelsonville	
Pendergrass, Maud	
Peters, Crissie May	
Pickering, Mary Elizabeth	
Reah, Mary Zaleski	
Roach, Eva May	
·	
Roseboom, Lulu BelleFrankfort	
Russell, Lena L	
Scott, Anna Marie	
Scott, Grace GreenwoodAthens	
Sisson, BlancheNelsonville	
Slattery, Mary LAthens	
Smith, GraceMarchmont	
Smith, Stanley EmersonCenterburg	
Spencer, Holmes AugustusParkersburg, W. Va.	
Swaim, Clement Celsus	
Taylor, Lucy May	
Ullom, Helen MacbethAthens	
Waggoner, Chauncey WilliamSugar Grove	
Walker, MaryAthens	
Walker, Nell HutchensAthens	
Walsh, Emma EvelynAthens	
Warren, Samuel C Athens	
Watkins, Daisy MaudeLogan	
Welch, FrancesAthens	
Wilson, Homer AbsalomRehoboth	
Wood, Mary EllenAthens	
Zang, Jacob MiltonNewport, Pa.	
Zeller, Frank Parthenia	
SUMMARY.	
Post Graduate 1	
Class of 1899	
Seniors	S.c.
Juniors	
Sophomores 30	

Freshmen	42
Irregular and Special Students	9
Third Preparatory	59
Second Preparatory	
First Preparatory	122
Commercial Students	
Music Students	
\$	516
Names counted more than once	
Total	$\overline{441}$

Alumni Association.

Constitution.

ARTICLE I. This Association shall be called the "Alumni Association of the Ohio University."

ART. II. The Officers of the Association shall be a President, Vice President, Secretary, Treasurer, and an Executive Committee, consisting of three members, to be chosen annually.

ART. III. The annual meetings of this Association shall be held in connection with the Commencement exercises of the University.

ART. IV. The object of this Association shall be to cultivate fraternal relations among the Alumni of the University, and to promote the interests of our Alma Mater by the holding of social reunions, by literary exercises, or by such other means as the Association may, from time to time, deem best.

ART. V. Any member of the Faculty, and graduate of the University, also any one who has spent three years in the college classes of the University, and has been honorably dismissed, may, by the payment of one dollar and the signing of the Constitution, become a member of this Association.

ART. VI. This Constitution may be altered or amended at any annual meeting, by a vote of two-thirds of those present at such meeting.

ART. VII. Amendment. The members of this Association shall each pay into its treasury an annual fee of one dollar, and the sum so paid shall be expended in defraying the expenses of the annual reunion.

OFFICERS OF THE ALUMNI ASSOCIATION.

President, L. G. Worstell, '88.

Vice-President, Professor B. O. Higley, '92.

Secretary, Miss Mary Ullom, '96.

Treasurer, C. M. Copeland, '96.

EXECUTIVE COMMITTEE.

Mrs. E. D. Sayre, '88.

Miss Amy Weihr, '95.

L. M. Jewett, '61.

W. B. Lawrence, '92.

I. M. Foster, '95.

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